

Data representation

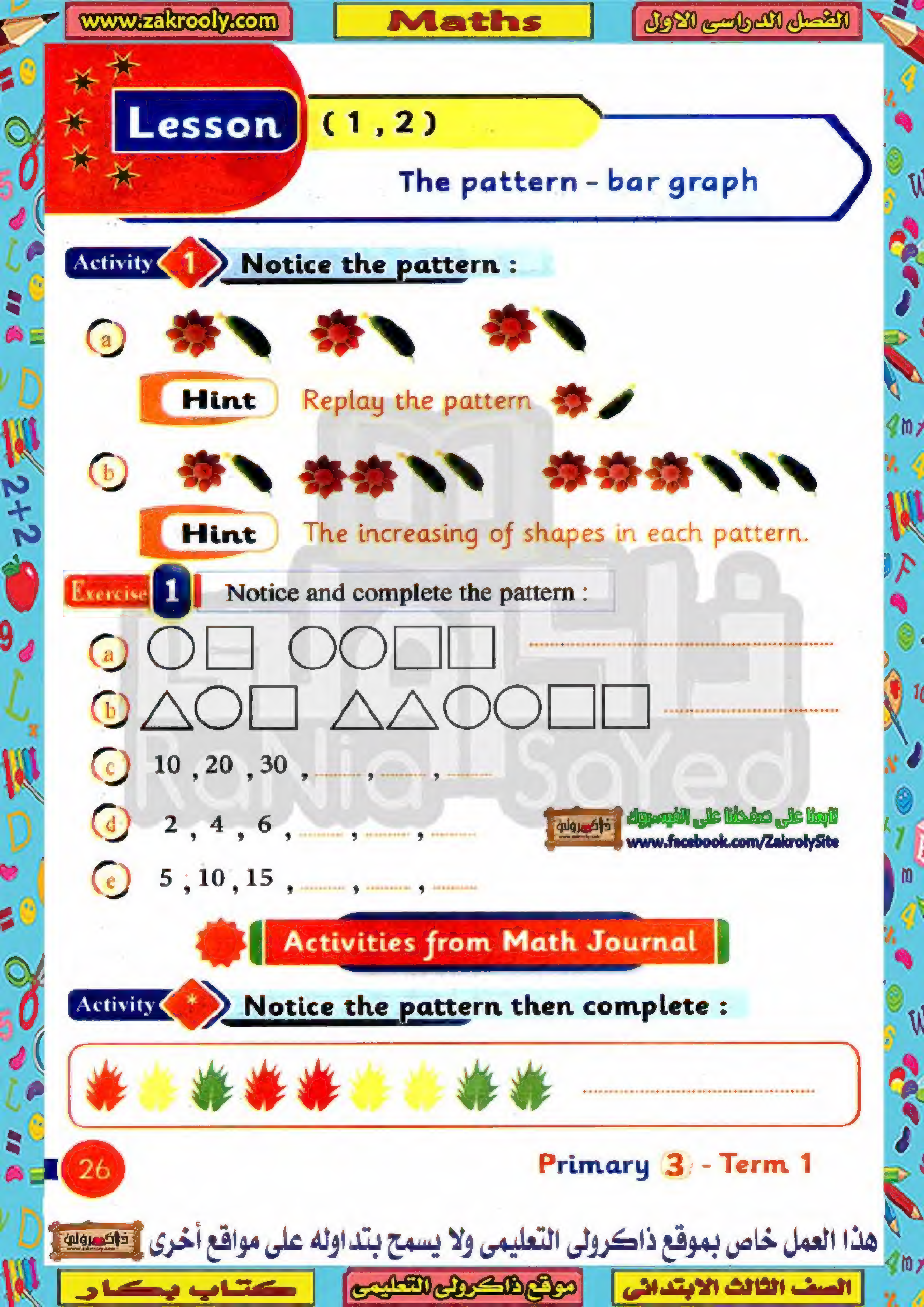
Key Vocabulary

Axe	المحور
Bar graph	التمثيل البيانى بالأعمدة
Centimeter	سنتيمتر
Check list	قائمة التحقق
Estimate	تقدير
Evaluation	التقييم
Greater than	أكبر من
Head	رأس
Horezontsl	أفقى
Increasing	الزيادة
Items	العناصر
Key	المفتاح
Length	الطول
Line	الخط
Measure	المقياس

Metre	متر
Millimeter	المليمتر
Number line	خط الأعداد
Number pattern	نمط الأعداد
Number plots	مخطط التمثيل بالنقاط
Numeral data	البيانات العددية
Pattren	النمط
Pictograph - Picture graph	التمثيل البيانى بالصور
Preserverance	المثابرة
Refrences marks	العلامة المرجعية
Repeating	التكرار
Smaller than	أصغر من
Statistical signs	علامات الإحصاء
Table	الجدوا
Visual pattern	النمط البصري

Content

- Bakkar Self-Check
- Bakkar Exercise on lessons
- Exercise insipred from Math Journal
- Exercise inspired from Discover



Lesson (1 , 2)

The pattern - bar graph

Activity 1 Notice the pattern :

(a)

Hint Replay the pattern

(b)

Hint The increasing of shapes in each pattern.

Exercise 1 Notice and complete the pattern :

(a) ○ □ ○ ○ □ □ ....

(b) △ ○ □ △ △ ○ ○ □ □ ....

(c) 10 , 20 , 30 , ... , ... , ...

(d) 2 , 4 , 6 , ... , ... , ...

(e) 5 , 10 , 15 , ... , ... , ...

Activities from Math Journal

Activity Notice the pattern then complete :

....



Exercise 2 Predict the number of oranges in the last figure :

The number 1 2 3 ....

Hint Add 1 orange each pattern

Exercise 3 Predict the number of bells in the last figure :

The number 1 3 5 ....

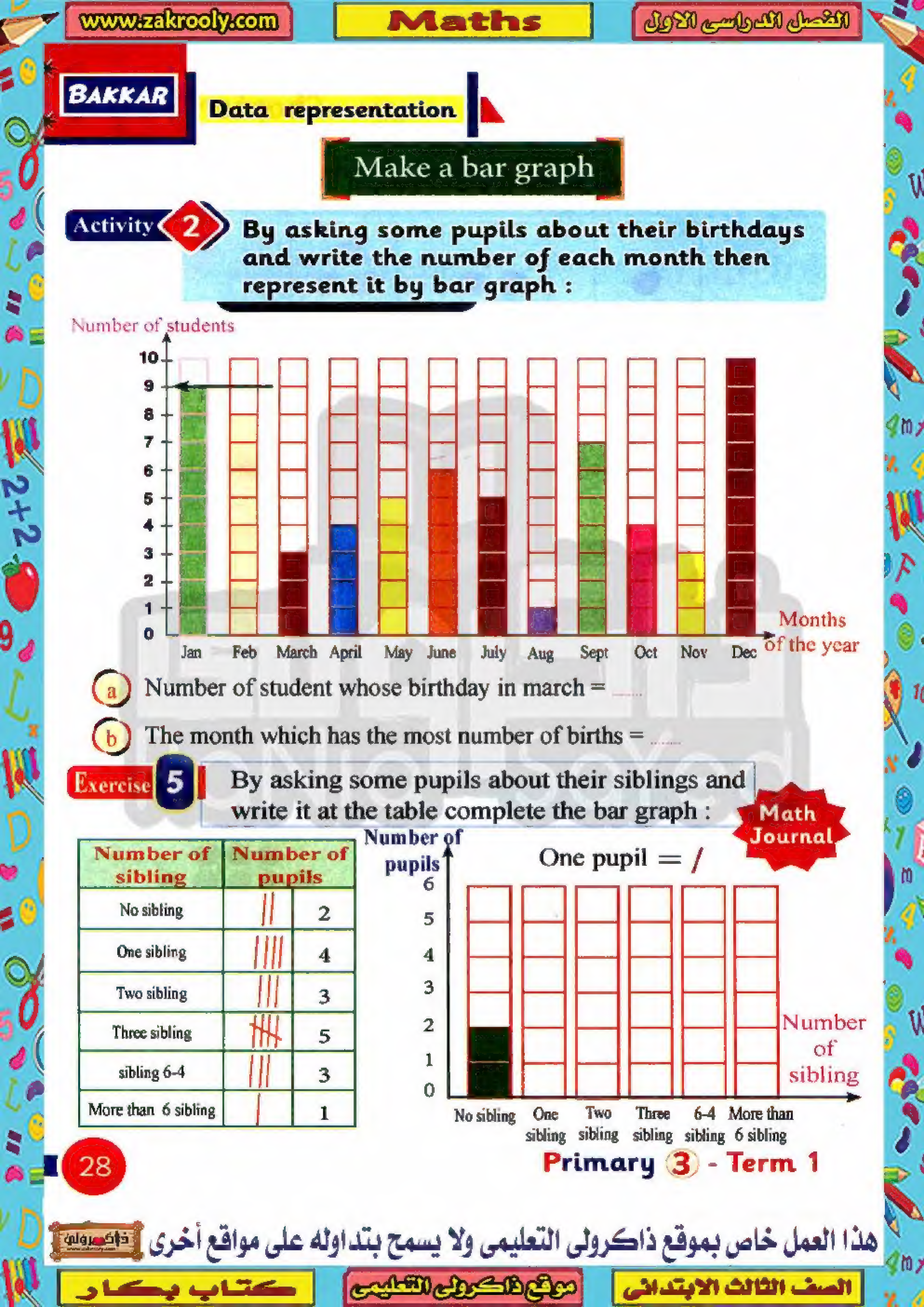
Hint Add 2 bells each figure.

Exercise 4 Complete the fourth : Math Journal

The number 4 9 16

The number ....

Hint Add Row has 2 counters more than the base row :



BAKKAR

Data representation

Make a bar graph

Activity 2 **By asking some pupils about their birthdays and write the number of each month then represent it by bar graph :**

(a) Number of student whose birthday in march = ...

(b) The month which has the most number of births = ...

Exercise 5 By asking some pupils about their siblings and write it at the table complete the bar graph :

Math Journal

Number of sibling	Number of pupils	
No sibling	//	2
One sibling	////	4
Two sibling	///	3
Three sibling	~~////~~	5
sibling 6-4	///	3
More than 6 sibling	/	1

Self - check on lesson (1, 2)

1 Notice the pattern and complete :

a) ○ □ ○ □ ....

b) △ □ △ △ □ △ ....

c) / // /// //// ....

d) xy xyy xyyy ....

e) ....

2 Complete the table and colour the bar graph :

One pupil = /

pupil	Number of pieces	
First	////	....
Second	//	....
Third	~~////~~ ~~////~~	....
Fourth	~~////~~	....
Fifth	/// ~~////~~	....

The number
10
9
8
7
6
5
4
3
2
1
0
First Second Third Fourth Fifth
Pupil

BAKKAR

Data representation

3 The following table shows the numbers of some types of fish in a restaurant, draw the bar graph :

Kind of fish	Number of fish	
Shark	𝍸	.....
Mullet	𝍸 𝍸 𝍸	.....
Tuna	𝍸 𝍸 𝍸 𝍸 𝍸 𝍸	.....
Mussa fish	𝍸 𝍸	.....
Mackerel	𝍸 𝍸 𝍸 𝍸 𝍸	.....

Number

50, 45, 40, 35, 30, 25, 20, 15, 10, 5, 0

Kind

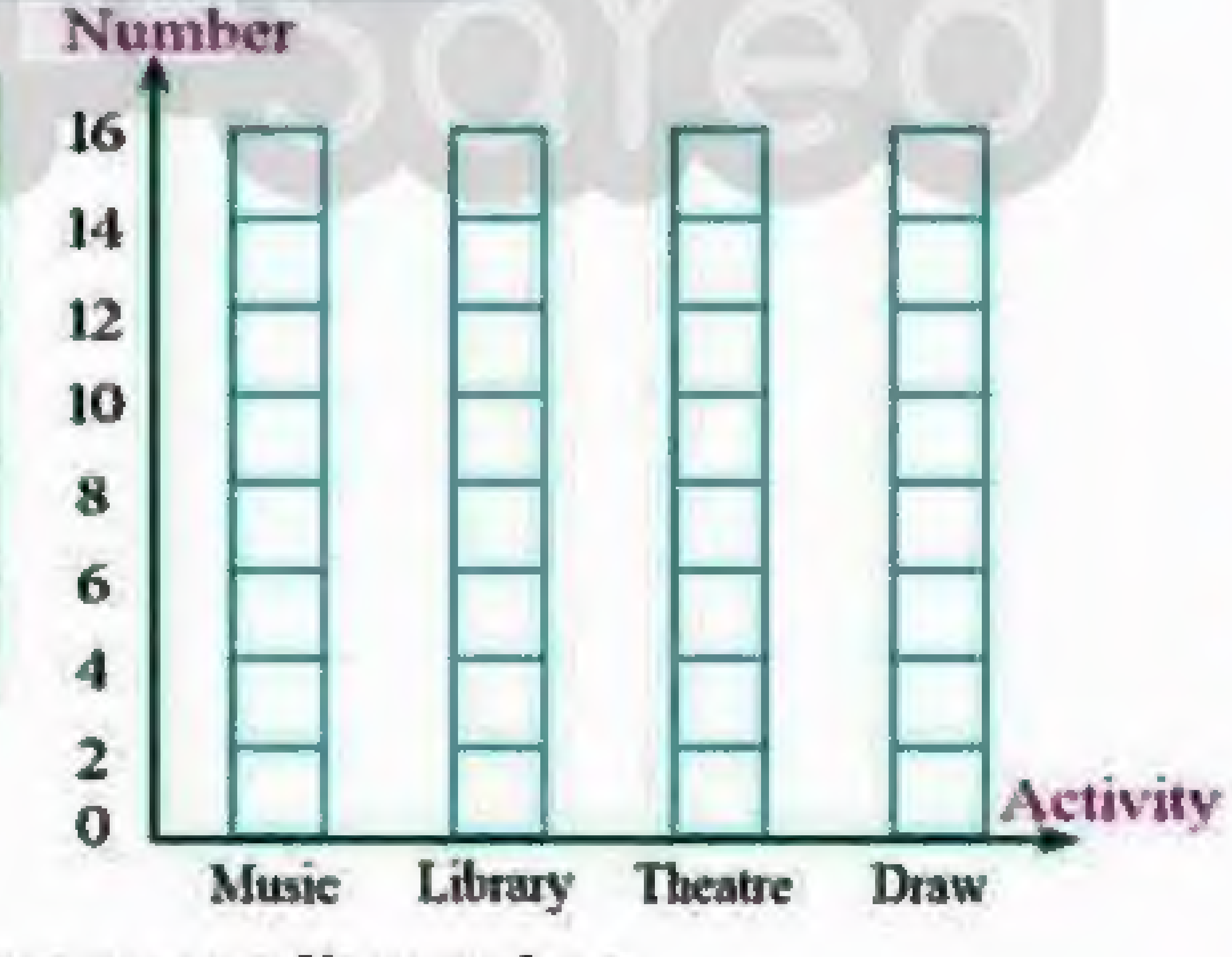
Shark, Mullet, Tuna, Mussa fish, Mackerel

(a) How many tuna and sharks together ? ....

(b) What is the difference between the number of Tuna and Mussa? ....

4 From the table draw the bar graph :

Activity	Number	
Music	𝍸 |||	.....
Library	𝍸 𝍸 ||	.....
Theatre	𝍸 𝍸 ||||	.....
Draw	||||	.....



- Arrange the activities in an ascending order :

....

Lesson (3 , 4)

Picture graph - line plots

Activity 1 The teacher ask the pupils about there prefer sweet and from the following table , complete the picture graph :

Math Journal

My favorite desserts	
Basbousa	////
kunafa	//// 𝍸
Sweet potatoes	// 𝍸 𝍸
Sweet feteer	///
Rice pudding	𝍸
Om Ali	𝍸 𝍸

Basbousa	◍ ◍
kunafa	◍ ◍ ◍ ◍ ◗
Sweet potatoes	◍ ◍ ◍ ◍ ◍ ◍
Sweet feteer	
Rice pudding	
Om Ali	

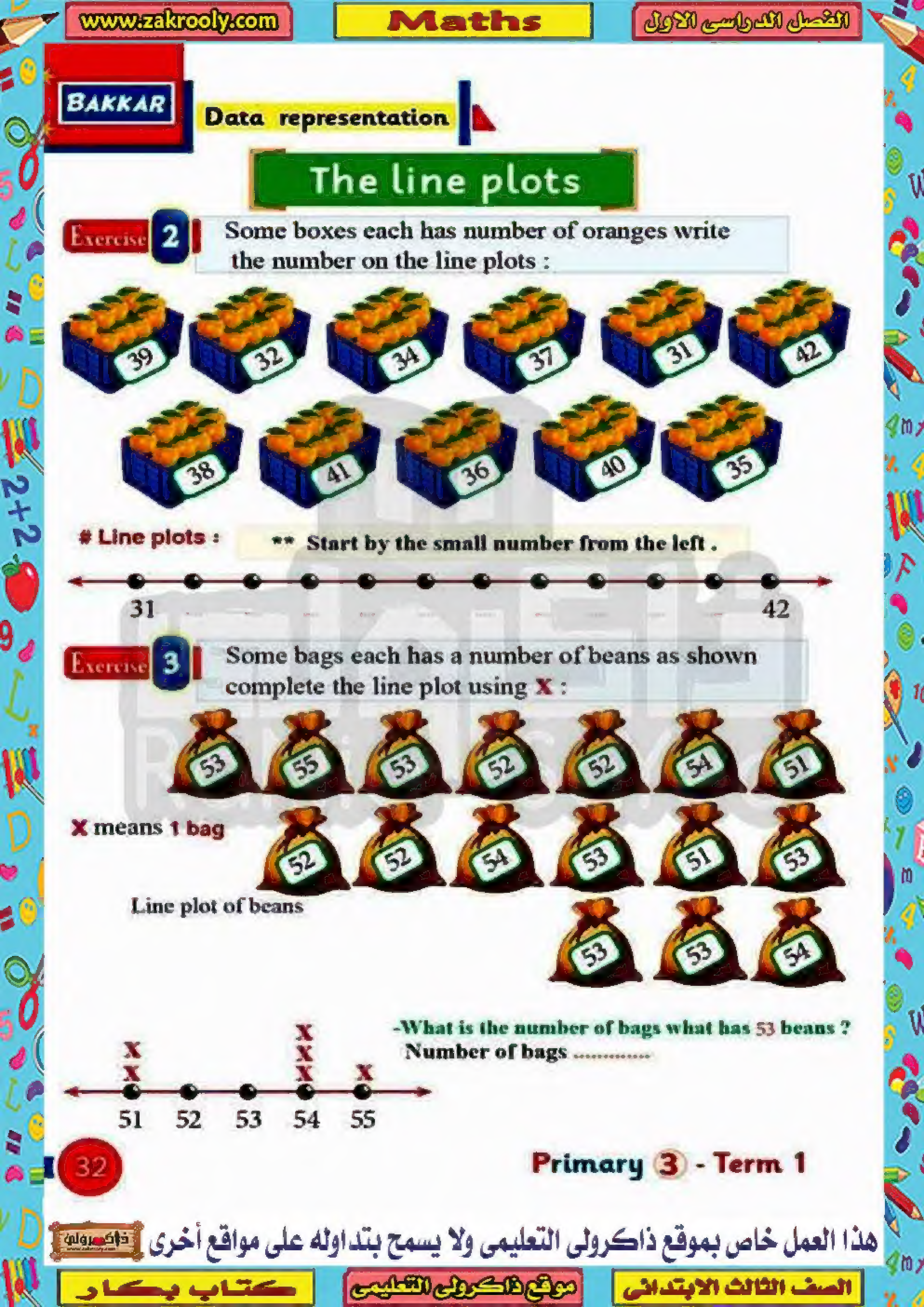
Key: ◍ = 2 pupils , ◗ = 1 pupil

Exercise 1 Complete the picture graph :

Activity	Number of pupils
Sporty	////
Theatrical	///
Singling	// 𝍸
Musically	/ 𝍸

Sporty	
Theatrical	□ ⊏
Singling	
Musically	□ □ □

Key: □ = 2 pupils , ⊏ = 1 pupil



BAKKAR

Data representation

The line plots

Exercise 2 Some boxes each has number of oranges write the number on the line plots :

Line plots : ** Start by the small number from the left .

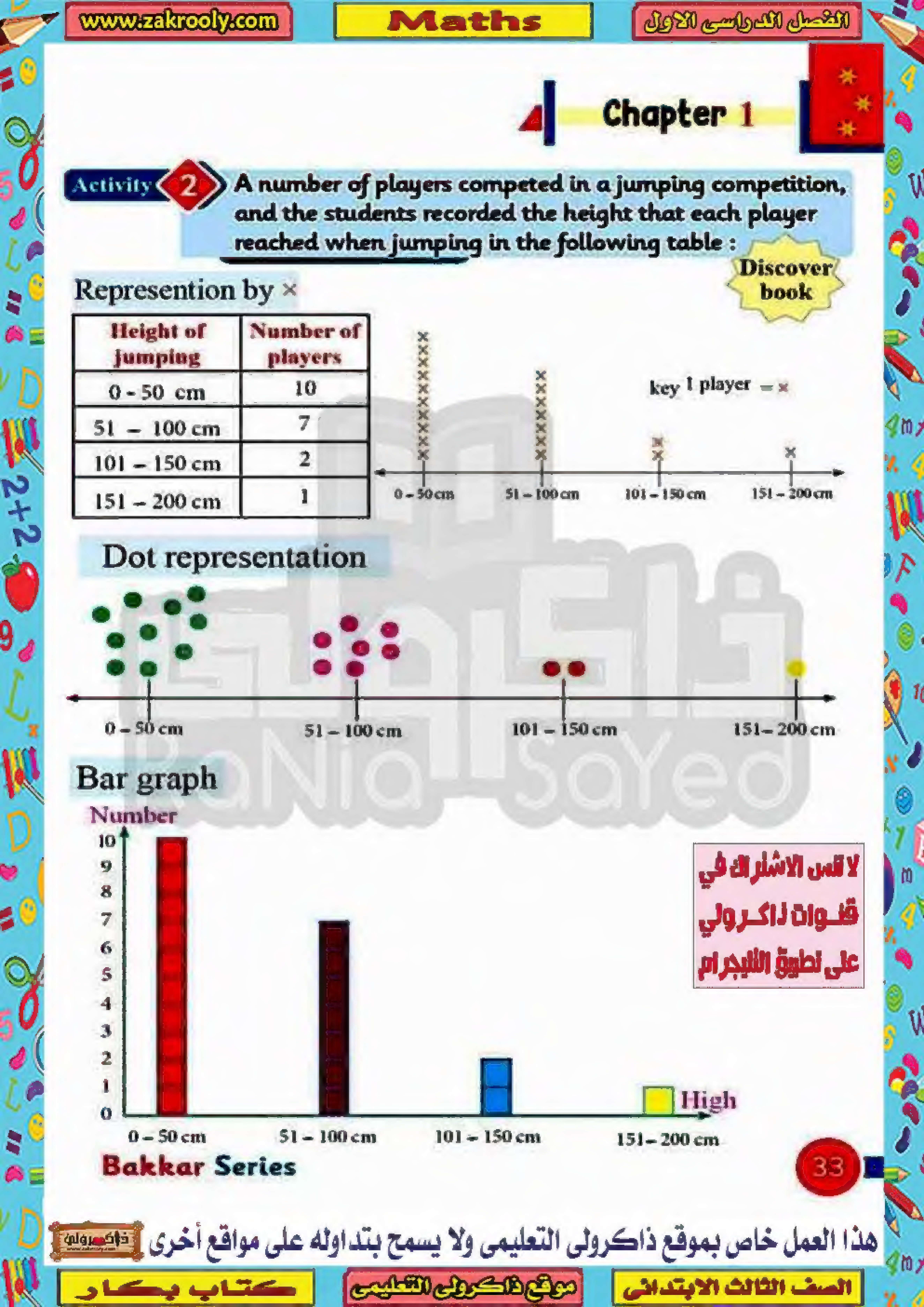
Exercise 3 Some bags each has a number of beans as shown complete the line plot using **X** :

X means 1 bag

Line plot of beans

-What is the number of bags what has 53 beans ?

Number of bags ....



Activity 2 A number of players competed in a jumping competition, and the students recorded the height that each player reached when jumping in the following table :

Discover book

Represention by ×

Height of jumping	Number of players
0 - 50 cm	10
51 – 100 cm	7
101 – 150 cm	2
151 – 200 cm	1

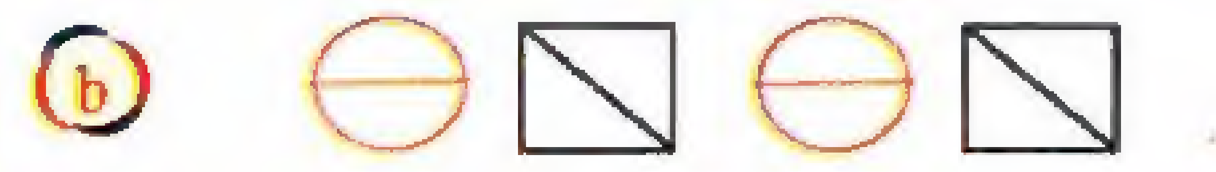
Dot representation

Bar graph

Self - check on lesson (3 , 4)

1 Complete the following patterns :

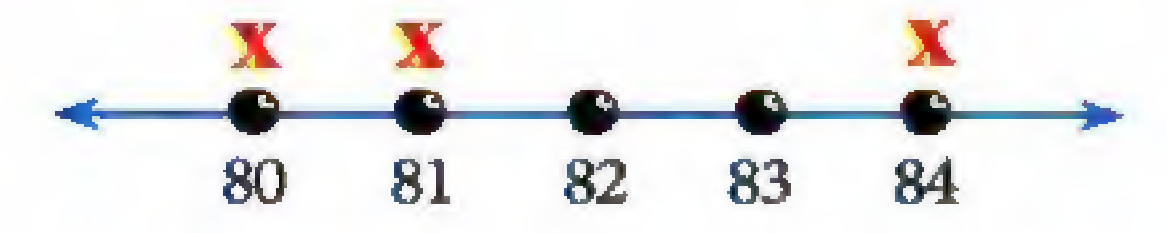
(a)  ....

(b)  ....

(c) **AB AABB** ....

2 Each bag contain a number of potatoes as shown .
Complete the line plot use X for each number :





Complete :

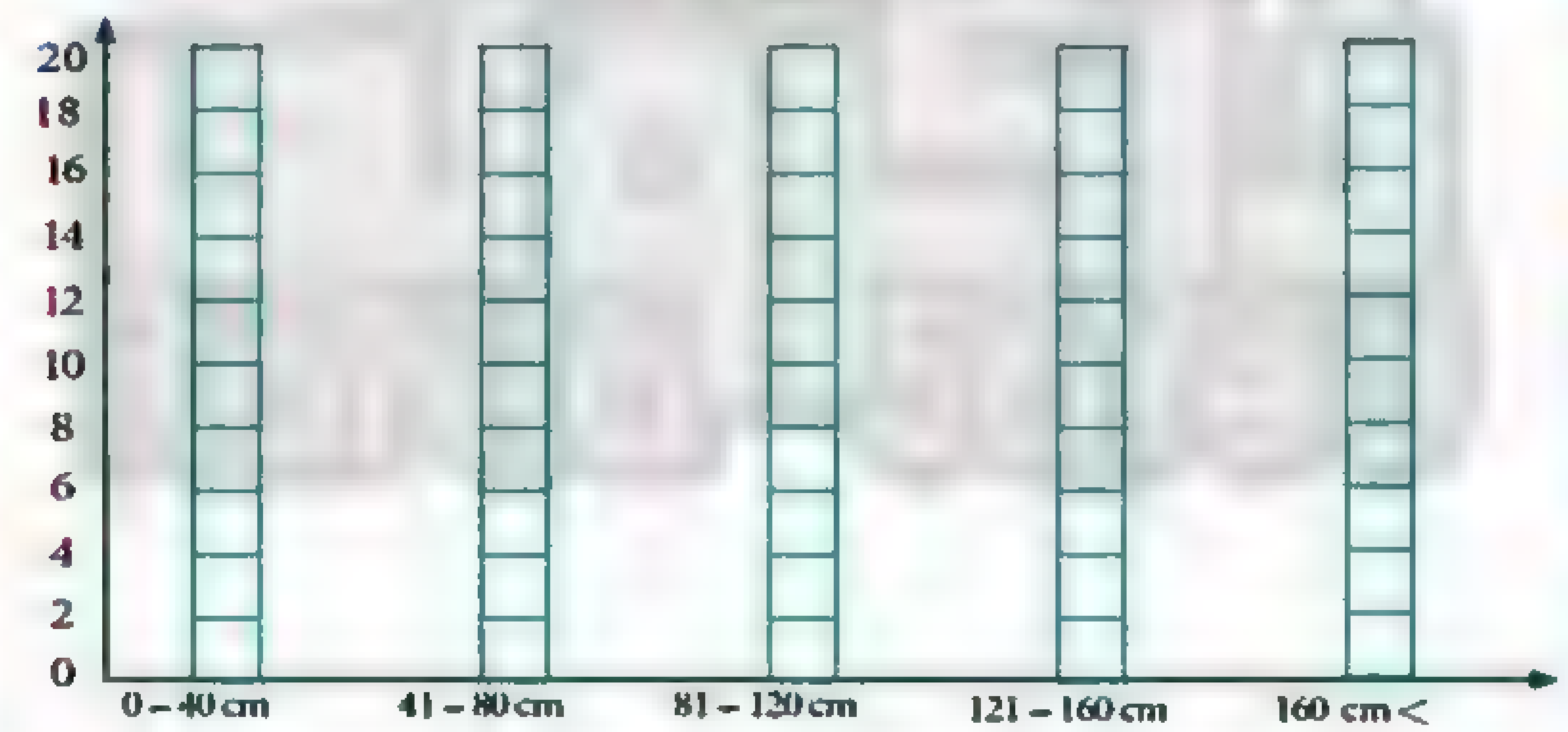
(a) Number of all = ...

(b) Number of bags that has 83 potatoes = ...

Chapter 1

3 The answers of 52 pupils in your class recorded the distance that each of them jumped by placing the marks 卌 in the correct row in the next chart complete the data representation graph and answer the following : **Discover book**

Jumping	Number of pupils	
0 - 40 cm	卌 III	......
41 - 80 cm	卌 卌 卌 I	......
81 - 120 cm	卌I	......
121 - 160 cm	卌 卌	......
160 <	卌 卌 II	......



(a) How far has the most number of pupils scored ? ....

(b) How far did the least pupils scored ? ....

(c) How many students jumped 121 or more ? ....

Lesson (5 , 6 , 7)

Measuring Length using cm , m - Estimate the lengths .

Activity 1 Length of the students hand from wrist to middle finger :

X = One student

Length in cm	10	11	12	13	14	15
Students	X	XXX	XXX	XXXX	XXXXXX	XXX

From the line plots complete :

a) Number of Student who's hand length 11 cm = ...

b) Number of Student who's hand length 14 cm = ...

c) Number of Student who's hand length 15 cm = ...

d) The Number of students who's hand length less than 13 cm = 3+3+1 = ...

e) The Number of students who's hand length between 13 and 15 cm = ...

Exercise 1 Use ruler to find the length of the following :

a) ____ cm

b) ____ cm

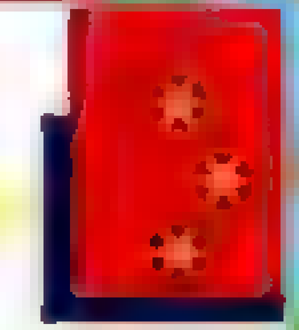
c) ____ cm

d) ____ cm

e) ____ cm

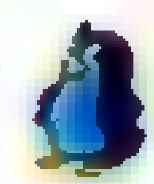
The order of the lengths from shortest to longest :

____ , ____ , ____ , ____ , ____



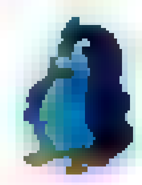
Chapter 1

Estimate the length



Centimetre (cm) : Used to measure the short lengths .

Example : the length of a pen 16 cm .



Metre (m) :

Example : the width of the road about 20 m the height of the building about 30 m .



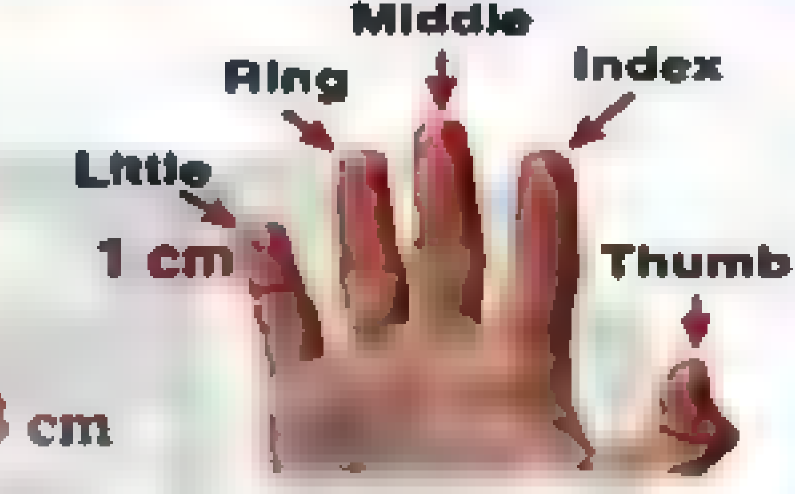
In each of the following read the measure on the ruler [estimated length] then write the actual length :

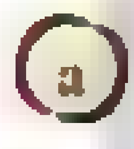


The actual = 4 cm



The estimate length about= 3 cm



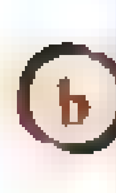


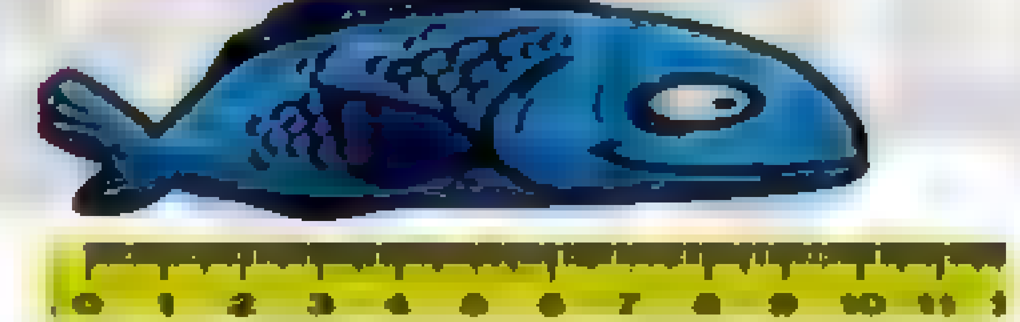




the estimate .... cm

the actually .... cm





the estimate .... cm

the actually .... cm

Exercise 2 Choose the estimated length :

a) The width of the road is ...... m (1 , 6 , 600)

b) The length of Lamppost is ...... m (5 , 50 , 500)

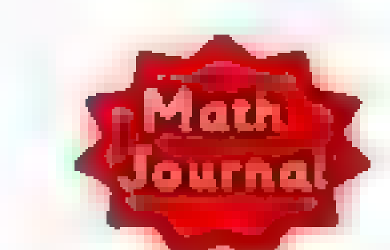
c) The length of my father car is ...... m (4 , 9 , 15)

d) The length of piece cloth for my mother is ...... m (3 , 40 , 35)





Data representation



Exercise 3 Choose the suitable measurement unit :

Image	Meters (m) or Centimeters (cm)
	....
	....
	....

Exercise 4 Complete as in (a) :

1 meter = 100 cm

(a) 4 m = 400 cm .

(b) 9 m = ... cm .

(c) 1 m = ... cm .

(d) 3 m = ... cm .

(e) Half of meter = ... cm .

Exercise 5 Complete as in the example :

Example : 300 cm = 3 m

(a) 500 cm = ... m

(b) 600 cm = ... m

(c) 700 cm = ... m

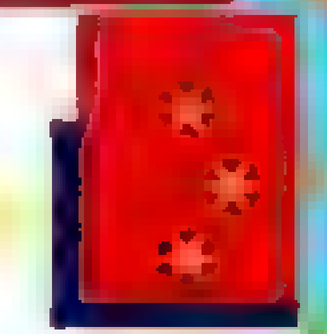
(d) 400 cm = ... m

(e) 100 cm = ... m

(f) 900 cm = ... m







Activity 3 Arrange the following in an ascending order :

(a) 5 m , 3 m , 7 m , 2 m .

Solution The order : 2 m , 3 m , 5 m , 7 m

(b) 20 cm , 35 cm , 40 cm , 15 cm .

Solution The order : 15 cm , 20 cm , 35 cm , 40 cm

(c) 3 m , 200 cm , 5 m , 700 cm .

Solution 3 m = 300 cm , 5 m = 500 cm

The order : 200 cm , 3 m , 5 m , 700 cm .

Activity 4 Answer the following :

(a) If Iyad is (1 m and half meter).What is his tall in centimetre ?

Solution : Iyad tall = 100 + 50 = 150 cm .

(b) Ahmed is 186 cm high , Mostafa is 181 cm high .

Find the difference between there high of them?

Solution : Ahmed height = 186 cm , Mostafa height = 181 cm

The Difference : 186 − 181 = 5 cm .

Exercise 6 Answer the following :

Two pieces of cloth with 130 cm , 250 cm length Find :

(a) There sum (b) There difference

Solution : (a) the sum = ... + ... = ... cm.

(b) the difference = ... − .... = ... cm.

Self - check on lesson (5, 6, 7)

1 Complete :

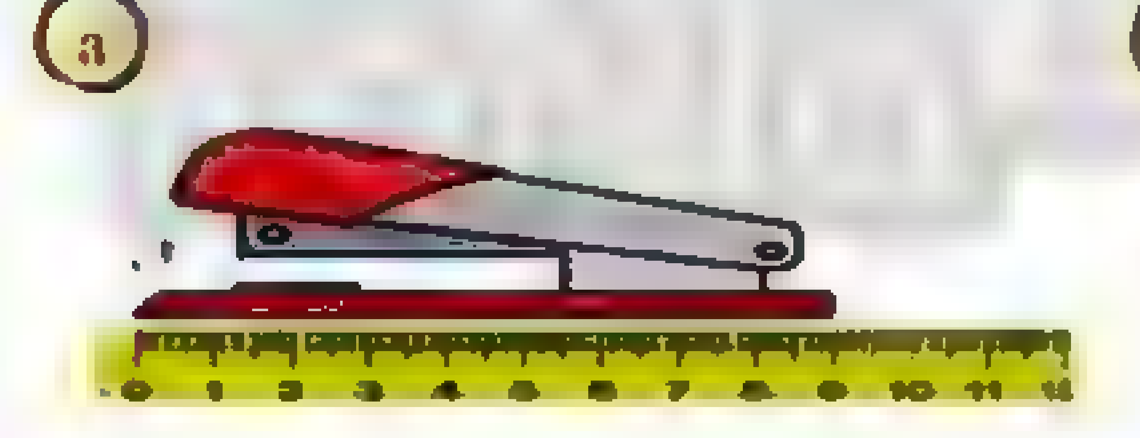
a) 5 m = ... cm
b) 7 m = ... cm
c) 3 m = ... cm
d) 6 m = ... cm
e) 2 m = ... cm
f) 8 m = ... cm

2 Complete :

a) 600 cm = ... m
b) 800 cm = ... m
c) 400 cm = ... m
d) 300 cm = ... m
e) 500 cm = ... m
f) 900 cm = ... m

3 Use the ruler to estimate the lengths then write the exact length :

a)



The estimation .... cm

The exact .... cm

b)



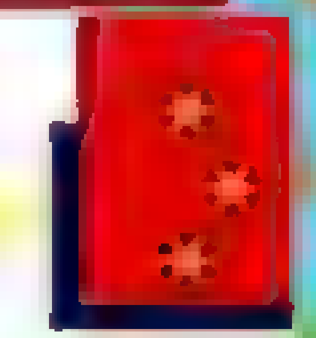
The estimation .... cm

The exact .... cm

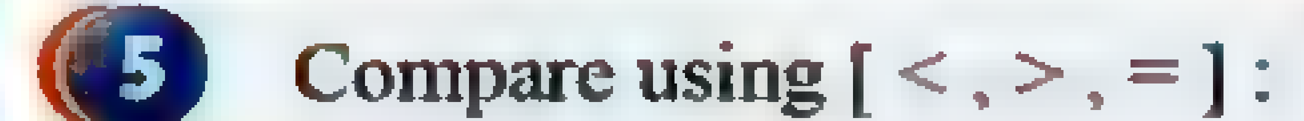
4 Arrange from the longest to the shortest :

[3 m , 200 cm , 5 m , 700 cm]

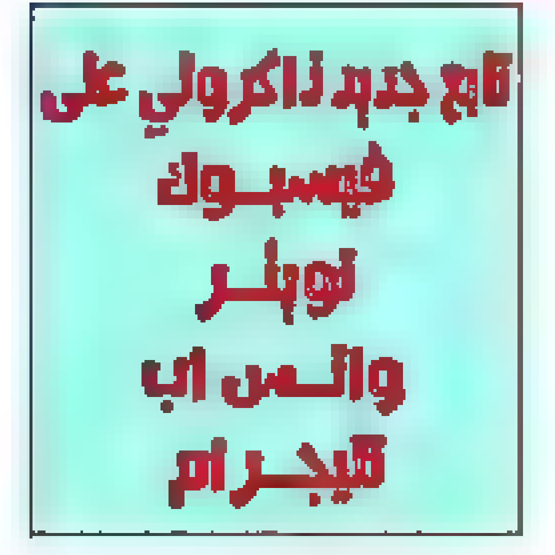
The order : .... , ... , ... , ...



Chapter 1



5 Compare using [< , > , =] :



(a) 300 cm .... 2 m

(b) 50 m .... 50 cm

(c) 100 cm .... 300 cm

6 Answer the following :

(a) A car with (3 m and 20 cm length) . How long the width in cm ?

Solution : 3 m = ... cm

The length = ... + ... = 320 cm .

(b) The width of the school door is (200 cm).

How long the width in meter ?

Solution : The width = ... m



7 Write the suitable measurement unit :

Math Journal

Image	Meter (m) or centimetre (cm)
	....
	....
	....



Lesson (8 , 9 , 10)

Millimetre

Exercise 1 Measure the pieces of string and record their length the complete the line plot :

	String	Length in cm
a		.... cm
b		.... cm
c		.... cm
d		.... cm
e		.... cm
f		.... cm
g		.... cm
h		.... cm
i		.... cm
j		.... cm

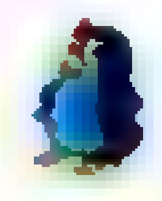
X

3 4 5 6 7 8

The length in cm



Millimeter

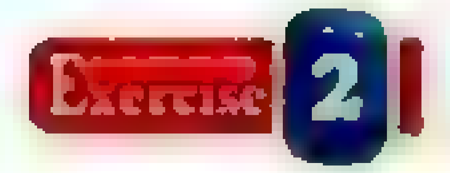


Millimetre (mm) Used to measure the very short lengths .

Example : the thickness of nail is 3 mm .

1 cm = 10 mm or 1 cm = 10 mm

2 cm = 20 mm , 3 cm = 30 mm



Exercise 2 Choose the suitable measurement unit :

a) The thickness of a nail measure with .... (mm - cm - m)

b) The length of the book measure with ...... (mm - cm - m)

c) The length of the ant measure with .... (mm - cm - m)

d) Thickness of the power cord measure with .... (mm - cm - m)

e) The length of my grandfather's stick measure with .... (mm - cm - m)

Exercise 3 Choose the correct answer :

a) My father high (2 m - 2 mm - 2 cm)

b) The length of (5 mm - 5 cm - 5 m)

c) The length of (30 cm - 30 mm - 30 m)

d) The thickness of the book (10 m - 10 mm - 10 cm)

e) The height of my home (21 mm - 21 m - 21 cm)





Data representation

Activity 1 The line plots show the length of the foot in cm to some pupils and their number :



1 pupils = x

length in cm	27	28	29	30	31	32
pupils	x	xx	xx	xxxxx	xxxxx	xxxx

From the figure complete :

(a) The number of pupils with foot 29 cm = ...

(b) The number of pupils with foot 30 cm = ...

(c) The number of pupils with foot 27 cm = ...

(d) The number of pupils with foot less than 29 cm = ... + ... = ...

(e) The number of pupils whose foot between 30 cm and 32 cm is = ... + ... + ... = ...

Exercise 4 Complete the following :

(a) 100 cm + 100 cm = ... cm = ... m

(b) 150 cm + 250 cm = ... cm = ... m

(c) 20 mm + 10 mm = ... mm = ... cm

(d) 30 mm + 30 mm = ... mm = ... cm

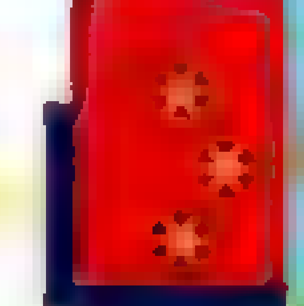
Solution

(a) 100 cm + 100 cm = 200 cm = 2 m

(b) 150 cm + 250 cm = 400 cm = 4 m

(c) 20 mm + 10 mm = 30 mm = 3 cm

(d) 30 mm + 30 mm = 60 mm = 6 cm



Chapter 1

Exercise 5 Choose the correct answer :

(a) 9 m = ... cm. (9 , 90 , 900)

(b) 6 cm = ... mm. (6 , 60 , 600)

(c) 30 mm = ... cm. (3 , 30 , 300)

(d) 200 cm = ... m. (2 , 20 , 200)

(e) 20 mm = ... cm. (2 , 20 , 200)

Exercise 6 Put (< , > , =) :

(a) 600 cm ☐ 5 m .

(b) 40 mm ☐ 4 cm .

(c) 750 cm ☐ 8 m .

(d) 5 cm ☐ 60 mm .

(e) 9 m ☐ 900 cm .



Exercise 7 Arrange the following :

(a) 14 mm , 17 m , 8 mm , 29 mm .

Ascendingly : .... , ... , ... , ...

(b) 2 cm , 10 mm , 5 cm , 70 mm .

Descendingly : .... , ... , ... , ...

Self - check on lesson (8 , 9 , 10)

1 Choose the suitable measurement unit :

a) The length of pencils measure with .... (mm - cm - m)

b) The length of bottle measure with .... (mm - cm - m)

c) The length of piece of cloth can be .... (4 cm - 4 mm - 4 m)

2 Complete :

a) 5 m + ... cm = 7 m

b) 200 cm + ... m = 5 m

c) 80 cm - ...... cm = 50 cm

d) 5 cm + ... mm = 7 cm

e) 30 mm + ... mm = 60 mm

f) 50 mm - ...... cm = 2 cm

g) 6 m - ...... cm = 500 cm

Remember

The metre = 100 cm

The centimetre = 10 mm

3 Put (< , > , =) :

a) 5 cm ☐ 50 mm

b) 50 cm ☐ 1 m

c) 10 mm ☐ 10 cm

d) 10 m ☐ 10 cm

e) 9 cm ☐ 9 mm .

Chapter 1

4 Complete :

a) 200 cm - 100 cm = ... cm = ... m

b) 5 cm - 3 cm = ... cm = ... mm

c) 7 m - 3 m = ... m = ... cm

d) 700 cm - 500 cm = ... cm = ... m

e) 40 mm - 30 mm = ... mm = ... cm

5 Arrange the following in an ascending order :

a) 3 m , 5 m , 1 m , 2 m . ...

b) 40 cm , 10 cm , 50 cm , 70 cm . ...

c) 10 mm , 20 mm , 80 mm , 60 mm . ...

d) 7 m , 100 cm , 9 m , 800 cm . ...

e) 17 cm , 7 mm , 70 cm , 70 mm . ...

6 Join :

1 Meter and half	4 m
300 cm	100 cm
1 m	150 cm
400 cm	2 m and 100 cm

Self - check 1 Chapters 1

1 Choose :

a) 7 m = ... cm (7 , 70 , 700)

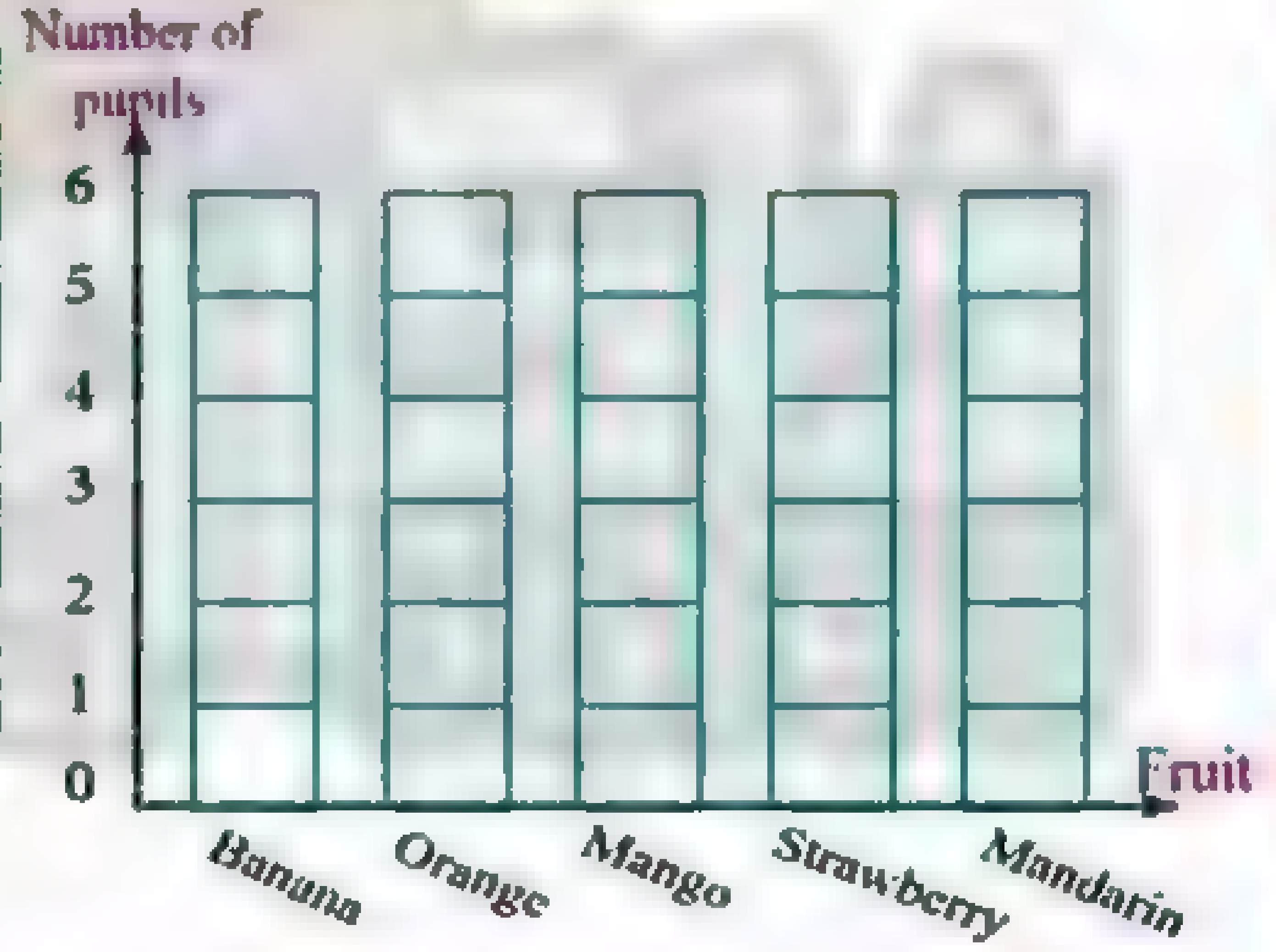
b) 5 cm = ... mm (5 , 50 , 500)

c) 90 mm = ... cm (9 , 90 , 900)

d) 300 cm = ... m (3 , 30 , 300)

2 Complete the table and colour the graph :

Fruit	Number of pupils	
Banana	////	
Orange	~~////~~ /	
Mango	///	
Strawberry	~~////~~	
Mandarin	~~////~~	



3 A car of (4 m and 40 cm). What its length in cm ?

Solution :

The length of the car = ... + ...

= ...... cm .





Self - check 2 Chapter 1

1 Complete :

(a) 500 cm - 300 cm = ... cm = ... m

(b) 9 cm - 4 cm = ... cm = ... mm

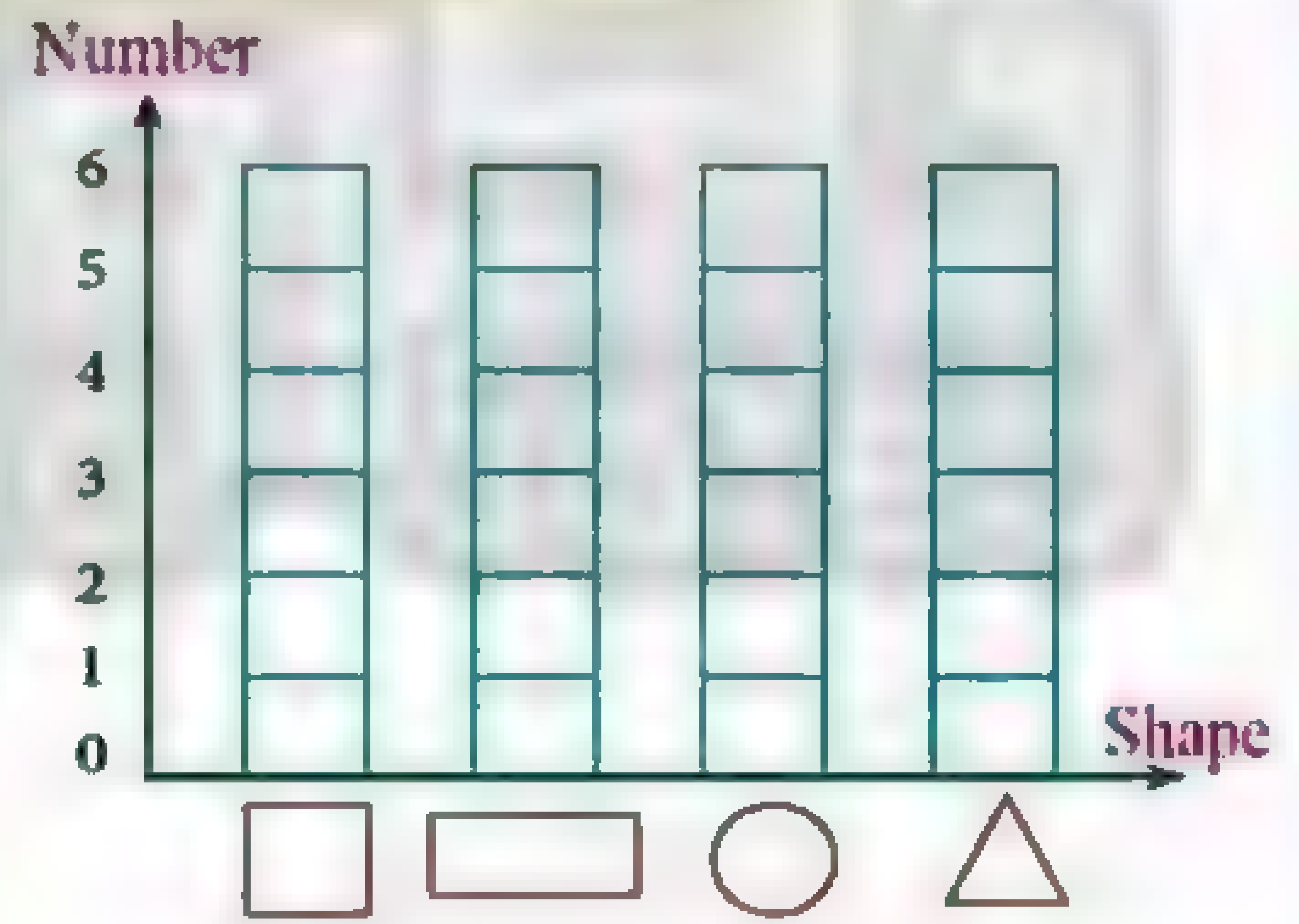
(c) 6 m - 4 m = ... m = ... cm

(d) 800 cm - 100 cm = ... cm = ... m

(e) 70 mm - 3 cm = ... mm = ... cm

2 Complete the table and colour the graph :

Shape	Number	
□ (square)	///	
▭ (rectangle)	//// /	
○ (circle)	𝍸	
△ (triangle)	/ 𝍸	

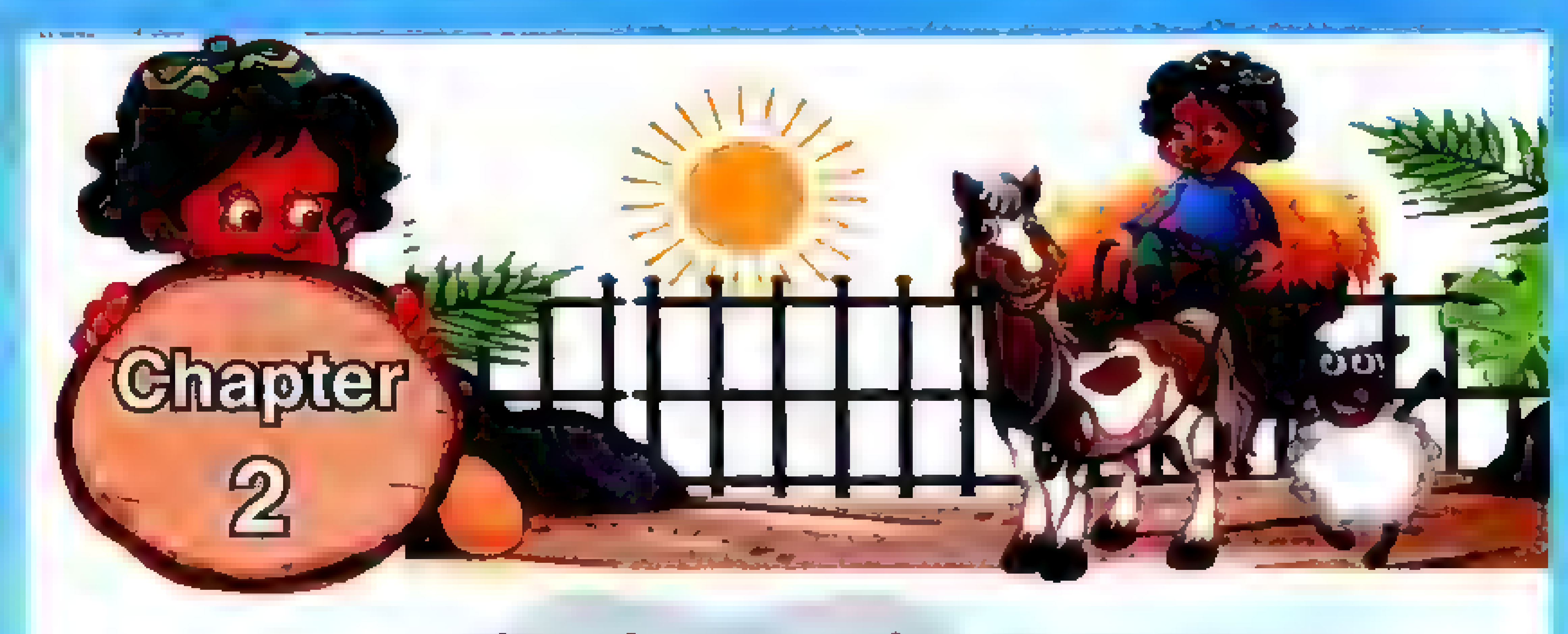


3 Choose :

6 meters and half = ... cm .

650 560 605

For more exercises follow the Bakkar Self check page (210)



The thousands - Multiplication

Key Vocabulary

Arrange	ترتيب
Array	المصفوفة
Assemblies	تجميعات
Bars	أعمدة
Column	العمود
Commutative property	خاصية الإبدال
Digit	رقم
Efficient	يتسم بالكفاءة
Equal	يساوي
Extended form	الصيغة الممتدة
Factor	العامل
Groups	مجموعات
Hundred thousands	مئات الألوف

Multiplication	الضرب
Number	عدد
Place value	القيمة المكانية
Product	حاصل الضرب
Repeated addition	الجمع المتكرر
Row	صف
Rows	صفوف
Skip - count	العد بالقفز
Standerd form	الصيغة الرمزية
Ten thousands	عشرات الألوف
The total	المجموع
Thousand	ألوف

Content



Bakkar Exercise on lessons

Exercise inspired from Math Journal

Exercise inspired from Discover

Lesson (11 , 12)

Thousands

Activity 1 Complete as in (a) :

Remember

(a) 753 = 7 hundreds + 5 tens + 3 ones
= 700 + 50 + 3

(b) 395 = ... hundreds + ... tens + ... ones
= .... + ... + ...

(c) 487 = ... hundreds + ... tens + ... ones
= .... + ... + ...

(d) 631 = ... hundreds + ... tens + ... ones
= .... + ... + ...

Activity 2 What is the greatest 3-digit number ?

Solution The number is 999

Hundreds	Tens	Ones
9	9	9

Nine hundred and ninety nine

The number just after 999 is 1000 (one thousand)

Thousands	Hundreds	Tens	ones
1	0	0	0

1000 is the smallest 4-digit number.

Activity 3 What is the greatest 4-digit number ?

Solution The number is 9999

Thousands	Hundreds	Tens	ones
9	9	9	9

Nine thousand nine hundred and ninety nine

BAKKAR

The thousands - Multiplication

Activity 4 How to read 4-digit ?

1253

Read from left to right as one thousand two hundred and fifty three

Exercise 1 Write the following numbers in the place value cards :

The number : 5019

Thousands	Hundreds	Tens	Ones

The number 3604

Thousands	Hundreds	Tens	Ones

The number : 1234

Thousands	Hundreds	Tens	Ones

The number 8888

Thousands	Hundreds	Tens	Ones

Activity 5 Notice the digit 4 in the following :

Number	Place value of 4	Value of 4
4	Ones	4
48	Tens	40
491	Hundreds	400
4673	Thousands	4000

Notice :
The value of 4 changed according to the place

Exercise 2 Notice the digit 3 in the following :

Number	Place value of 3	Value of 3
35		
3761		
63		
385		

Notice :
The value of 3 changed according to the place

Chapter 2

■ **Forming the greatest 4-digit number :**

Start with the greatest digit in the thousand place then the next greatest in the hundred place and so on

For example : Write the greatest 4-digit number from the digits :

7 3 2 5 → The greatest number= 7532

Activity 6 From the following digit put one digit in the discard then make the greatest number :

1 2 3 4 5

Example 1 :

Solution : Put 3 in the discard the form the greatest number

Thousands	Hundreds	Tens	Ones	Discard
5	4	2	1	3

The greatest Number is : 5421

Example 2 :

Thousands	Hundreds	Tens	Ones	Discard
....	....	....	....	5

The greatest Number is : ....

Activities from Math Journal

Activity From the following digit put one digit in the discard then write the greatest number :

7 1 5 4 6

Thousands	Hundreds	Tens	Ones	Discard
....	....	....	....	5

The greatest Number is : ....



BAKKAR The thousands - Multiplication

Activity 7 Notice :

1 10 100 1000

Activity 8 Represent the number 1253 in the place value card :

Thousands	Hundreds	Tens	Ones

Exercise 3 Convert the standard form to the extended form as EX :

The expanded form of : 1253 = 1000 + 200 + 50 + 3

1537 = ... + ... + ... + ...

5412 = ... + ... + ... + ...

6591 = ... + ... + ... + ...

3289 = ... + ... + ... + ...

Exercise 4 Compare using (> , = , <) :

(a) 4984 [........] 2026

(b) 1001 [........] 3980

(c) 9 thousands [........] 9000

Math Journal

Remember that :

Compare from thousand then hundred and so on

Self - check on lesson (11, 12)

1 Complete the table :

Number	Place value of 7	Value of 7
75	....	....
367	....	....
7100	....	....
4763	....	....

2 Write the number :

The number	Thousands	Hundreds	Tens	Ones
....				
....				

3 Write the expanded form :

(a) 5493 = ... + ... + ... + ...

(b) 6371 = ... + ... + ... + ...

(c) 8642 = ... + ... + ... + ...

(d) 2794 = ... + ... + ... + ...

BAKKAR The thousands - Multiplication

4 Write in digits :

(a) Six thousands five hundreds and forty three = ...
(b) Three thousands four hundreds and thirty seven = ...
(c) Two thousands six hundreds and forty = ...
(d) Five thousands nine hundreds and eleven = ...
(e) Seven thousands and one hundred = ...

5 Notice and complete the following pattern :

(a) 1000 , 1100 , 1200 , ... , ... , ... , ...
(b) 2000 , 1900 , 1800 , ... , ... , ... , ...
(c) 1000 , 2000 , 3000 , ... , ... , ... , ...
(d) 1000 , 1500 , ... , 2500 , ... , ... , ...

6 Arrange the following numbers in an ascending order :

4705 , 4750 , 4075 , 475

The order : ....

7 Complete using (> , = , <) :

Math Journal

(a) 8903 ☐ 9038 (b) 7787 ☐ 7878
(c) 1342 ☐ 1302 (d) 2344 ☐ 2345
(e) 6534 ☐ 6544 (f) 5871 ☐ 5671

Lesson (13 , 14)

Numbers up to hundreds thousand

Activity 1 The greatest 4-digit number is 9999 :

Solution :

The number is 9 999

Thousands	Hundreds	Tens	Ones
9	9	9	9

It read as : nine thousand , nine hundred and ninety nine

The number just after 9 999 is 10 000 (ten thousand)

Ten thousand	Thousands	Hundreds	Tens	Ones
1	0	0	0	0

10 000 is the smallest 5-digit number

Activity 2 What is the greatest 5-digit number ?

Solution :

The number is 99 999

Ten thousand	Thousands	Hundreds	Tens	ones
9	9	9	9	9

Read first 99 thousand

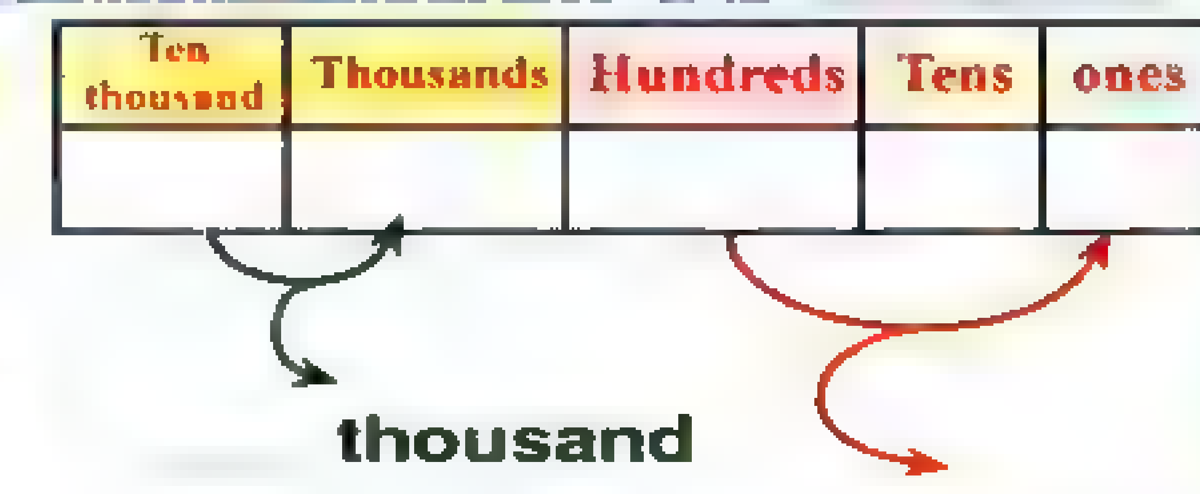
and 999

It is read as : ninety nine thousand , nine hundred and ninety nine

Exercise 1 Write the following number in the place value card then read it :

The number : 67459

Ten thousand	Thousands	Hundreds	Tens	ones



It is read as : sixty seven thousand , four hundred and fifty nine

BAKKAR

The thousands - Multiplication

Activity 3 The number just after 99 999 is 100 000 (hundred thousand) :

hundreds thousand	tens thousand	thousand	hundreds	tens	ones
1	0	0	0	0	0

The number 100 000 is the smallest 6 digit number

Activity 4 What is the greatest 6-digit number ?

The number 999 999

hundreds thousand	tens thousand	thousand	hundreds	tens	ones
9	9	9	9	9	9

Read first → 999 thousand

and 999

It is read as nine hundred ninety nine thousand , nine hundred and ninety nine

Exercise 2 Write the following numbers in the place value card :

The number : 267 459

hundreds thousand	tens thousand	thousand	hundreds	tens	ones

267 459

It read as 267 thousand and 459

The number : 107 326

hundreds thousand	tens thousand	thousand	hundreds	tens	ones

107 326

thousand and ....

The number : 950 108

hundreds thousand	tens thousand	thousand	hundreds	tens	ones

950 108

..... thousand and .....



Chapter 2

Comparing between 2 numbers

The number that has more digit is the greater

EX : The two numbers

96 157 and 815 734

96 157 → 5 digit, 815 734 → 6 digit

Then 815 734 > 96 157

If the two numbers has the same number of digit compare from left to right

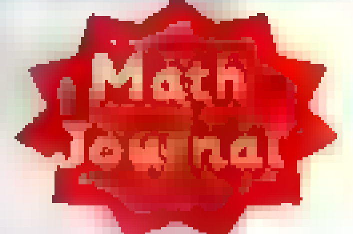
EX : The two numbers

915734 and 915634

Then : 915734 > 915634

Because : value of 7 more than value of 6

Exercise 3 Look the population number in some cites and complete :



City	Population	Reading the number
Suez	488125	488 thousand and 125
Matay	45215	....
Alshohadaa	48060	....
Port-said	538378	
Ettsa	45269	....

Arrange the cities from the smallest population to the greatest

The order : Matay , Ettsa , ... , ... ,

Exercise 4 Write the expanded form of the following as EX :

62 319 = 60 000 + 2 000 + 300 + 10 + 9

762 319 = ... + ... + ... + ... + ... + ...

15 780 = ... + ... + ... + ... + ...

812 904 = ... + ... + ... + ... + ... + ...

- **Forming the smallest 4-digit number :**

Put the smallest digit in the thousand place then hundred place and soon .

Example : Write the smallest number from the following digits :

7 3 2 5 ⟶ The number = 2357

Activity 5 From the cards ignore one card and form the smallest number from the other cards . as the example

1 2 3 4 5 6 7

Solution

Put 6 in discard then write the smallest number formed from the other cards

hundred thousand	Ten thousands	Thousands	Hundreds	Tens	Ones	Discard
1	2	3	4	5	7	6

The smallest number 123 457 Its read . thousand and

Activities from Math Journal

Activity Ignore one digit then form the smallest number :

6 4 5 1 9 3 8

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones	Discard

Its read thousand and

Self - check on lesson (13 , 14)

1 Write in standard from each of the following :

(a) Thirty six thousand and four hundred = ……………

(b) Eleven thousand =

(c) Sixty thousand and ten =

(d) Fifty two thousand one hundred and one =

(e) Ninety nine thousand and two hundred =

2 Notice and complete :

(a) 10000 , 10100 , 10200 , ……… , ……… , ……… , 10600

(b) 20000 , 19000 , 18000 , ……… , ……… , ……… , 14000

(c) 10000 , 30000 , ……… , ……… , 90000

(d) 11111 , 22222 , ……… , ……… , ……… , ……… , 77777

(e) ……… , 55800 , 55700 , ……… , ……… , ……… , 55300

3 Complete the table (the first done for you):

City	Population	Reading the number
sedy salem	47 998	47 thousand and 998
Jouhaina	47 821	
Tamia	46 866	
Luxor	422 407	

BAKKAR

The thousands - Multiplication

4 Write the expanded form of the following as EX :

Example : 12 576 = 10 000 + 2 000 + 500 + 70 + 6

a) 11 120 = ... + ... + ... + ... + ...

b) 14 502 = ... + ... + ... + ... + ...

c) 77 777 = ... + ... + ... + ... + ...

d) 50 021 = ... + ... + ... + ... + ...

e) 90 807 = ... + ... + ... + ... + ...

5 Arrange the following numbers :

a) 17 457 , 14 457 , 15 457 , 10 457 , 20 457

Descendingly : ....

b) 26 452 , 26 524 , 26 245 , 26 542 , 26 254

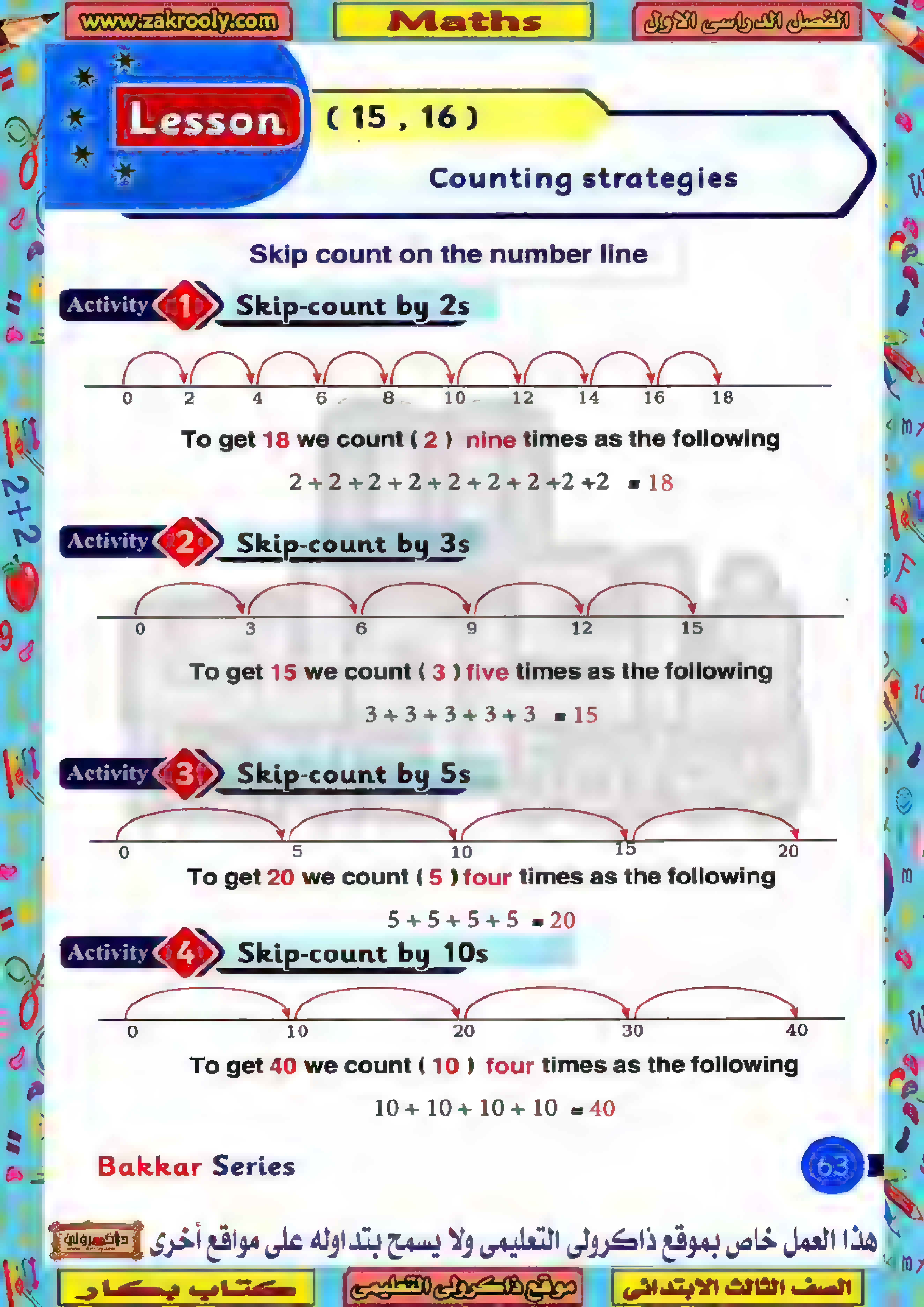
Ascendingly : ....

c) 67 500 , 67 005 , 60 705 , 60 075 , 67 050

Descendingly : ....

6 Using the cards write the greatest and the smallest number :

Cards	The greatest	The smallest
9 6 3 1 5	....	....
1 7 5 3 2	....	....
7 5 9 2 0	....	....
8 4 6 1 3	....	....



Lesson (15 , 16)

Counting strategies

Skip count on the number line

Activity 1 Skip-count by 2s

0 2 4 6 8 10 12 14 16 18

To get 18 we count (2) nine times as the following

2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 18

Activity 2 Skip-count by 3s

0 3 6 9 12 15

To get 15 we count (3) five times as the following

3 + 3 + 3 + 3 + 3 = 15

Activity 3 Skip-count by 5s

0 5 10 15 20

To get 20 we count (5) four times as the following

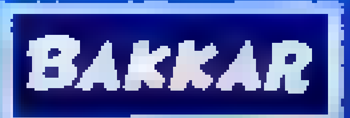
5 + 5 + 5 + 5 = 20

Activity 4 Skip-count by 10s

0 10 20 30 40

To get 40 we count (10) four times as the following

10 + 10 + 10 + 10 = 40



The thousands - Multiplication

Activity 5 Determine the number of items in each group :

First method



Number of rows 2

Number of items in each row 5

Total number of items = 5 + 5 = 10

Second method



Number of columns 5

Number of items in each column 2

Total number of items

= 2 + 2 + 2 + 2 + 2 = 10



Exercise 1 Determine the number of items in each group :

First method



Number of rows

Number of items in each row

Total number of items =

Second method



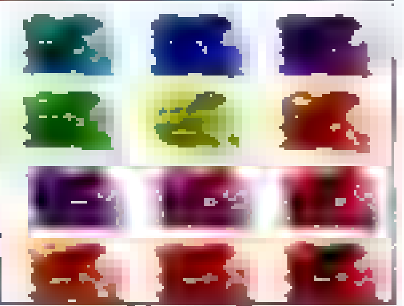
Number of columns

Number of items in each column

Total number of items =

Exercise 2 Determine the number of items in each group :

First method

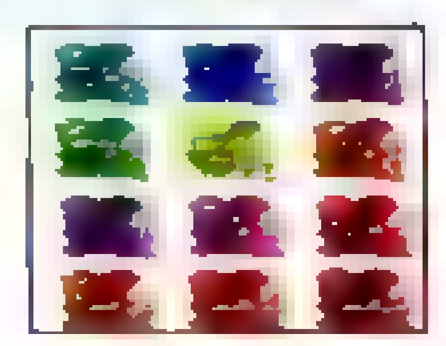


Number of rows

Number of items in each row

Total number of items =

Second method



Number of columns

Number of items in each column

Total number of items =





Chapter 2

Exercise 3 Determine the number of stars in each array :

Math Journal



Number of rows ....

Number of stars in each row ......

Total number = ...



Number of rows ....

Number of stars in each row ......

Total number = ...



Number of rows ......

Number of stars in each row ......

Total number = ...



Number of rows ....

Number of stars in each row ......

Total number = ...



The thousands - Multiplication



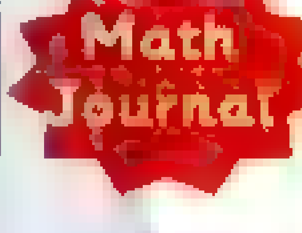
Activity 6 The price of each item LE 3 what is the price of the array ? :

Solution :

Number of rows 2
Number of items in each row 3
Number of all items = 3 + 3 = 6 items

Total price = 3 + 3 + ... + ... + ... + ... = ...
(Price of item, Price of item, Price of item, Price of item, Price of item, Price of item)





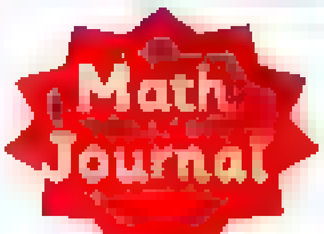
Exercise 4 Some of the stars have been ripped of .
How many stars were in the original array :



First method : number of columns 6
Number of stars in each columns 4
Total number of the original array = 24
There are 17 stars now
Number of ripped stars = 24 - 17 = 7

Second method : number of rows
Number of stars in each rows
Total number of the original array =
There are 17 stars now
Number of ripped stars = - =

Self - check on lesson (15 , 16)



1 Determine the number of stars in each array :



Number of columns ....

Number of stars in each column ....

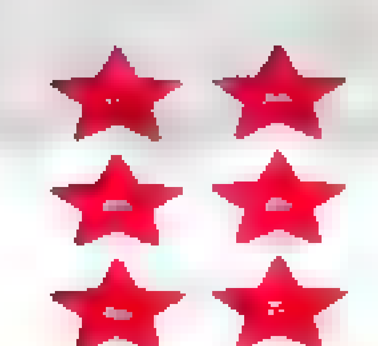
Total number of stars = ...



Number of columns ....

Number of stars in each column ....

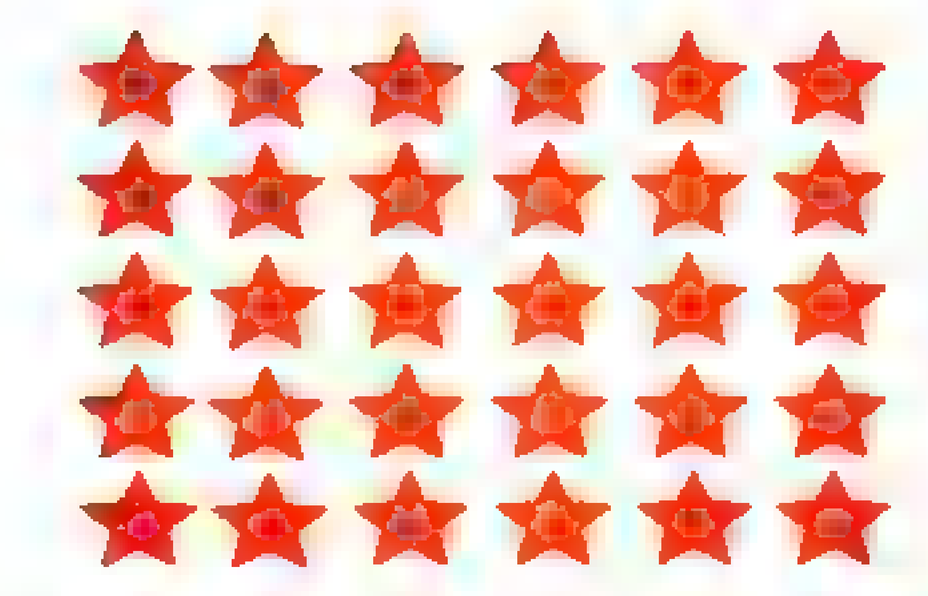
Total number of stars = ...



Number of columns ....

Number of stars in each column ....

Total number of stars = ...



Number of columns ....

Number of stars in each column ....

Total number of stars = ...

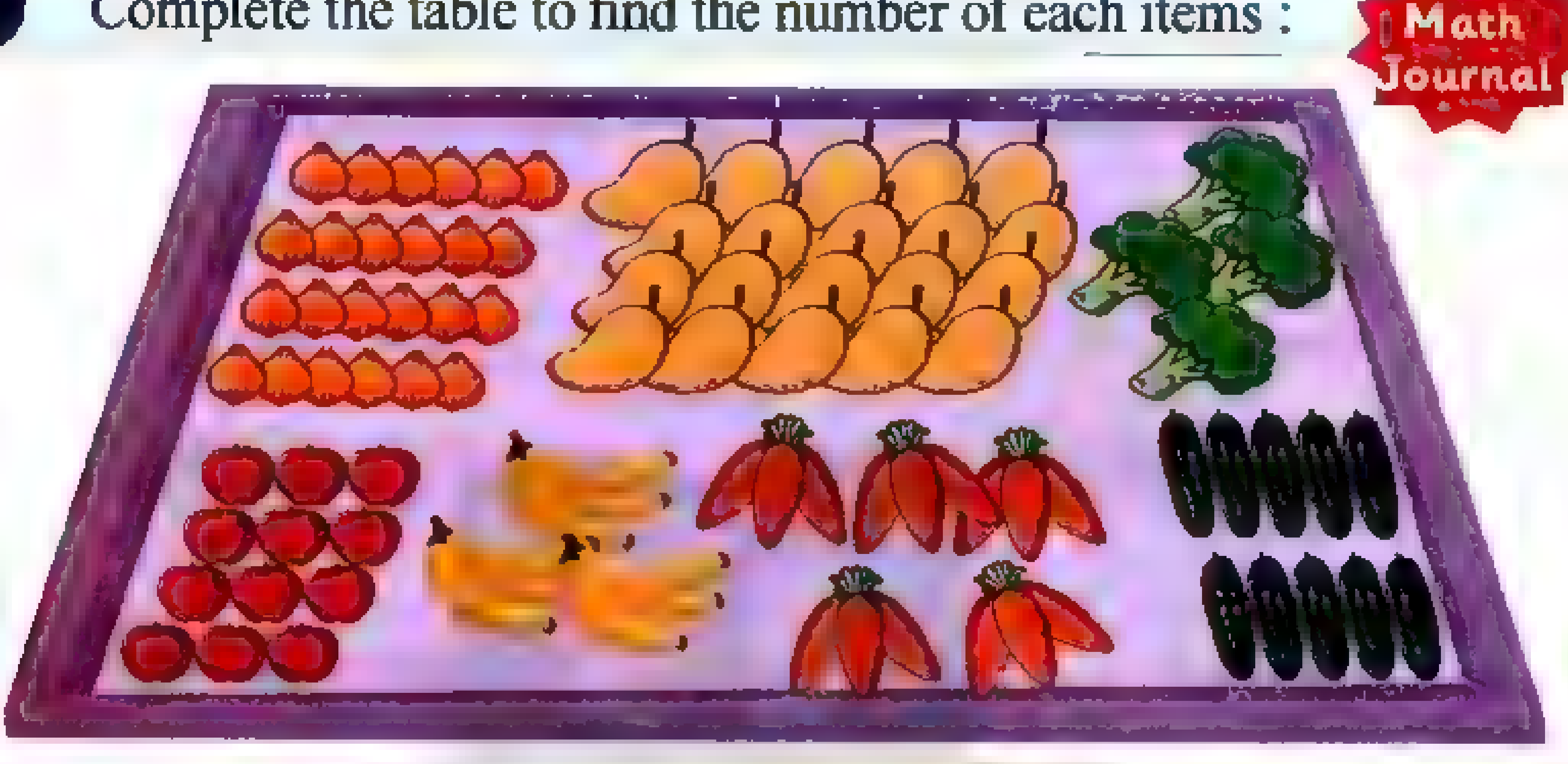


BAKKAR

The thousands - Multiplication

2 Complete the table to find the number of each items :

Math Journal



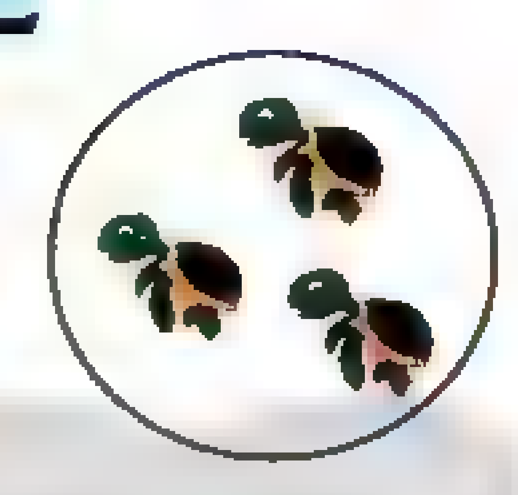
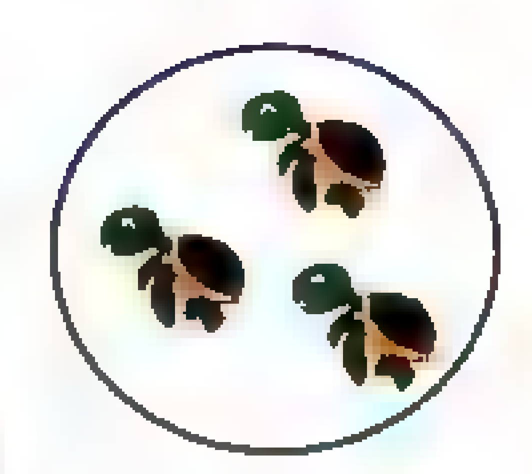
Name of group	Total number of item in each group
Apples	Number of row Number of apples in each row .... Total number of apples = 3 + 3 + 3 + 3 = 12
Figs	Number of row .... Number of apples in each row Total number of apples =
Mango	Number of row Number of apples in each row Total number of apples = ..
Cucumber	Number of row Number of apples in each row Total number of apples = ...



Lesson (17 , 18)

Multiplication [Repeated addition]

Activity 1 Notice :

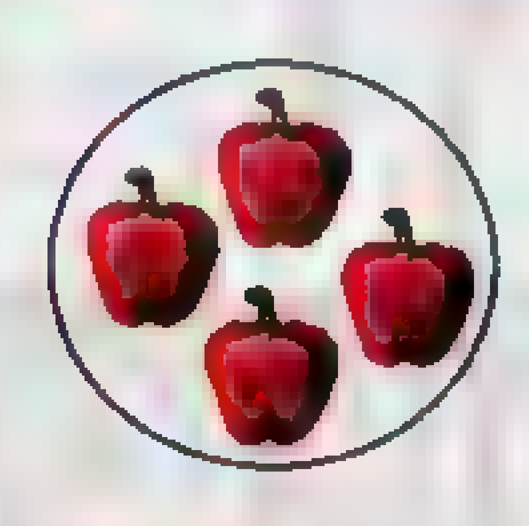
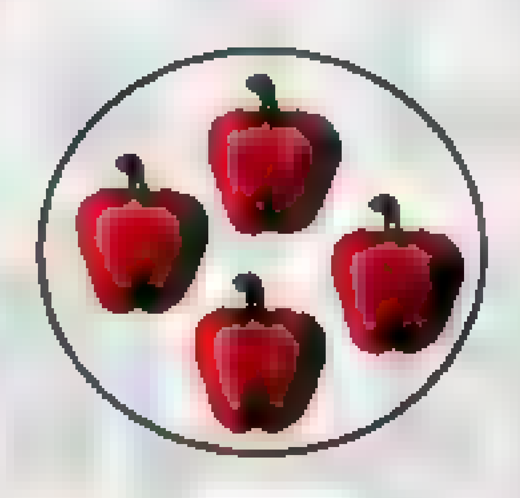
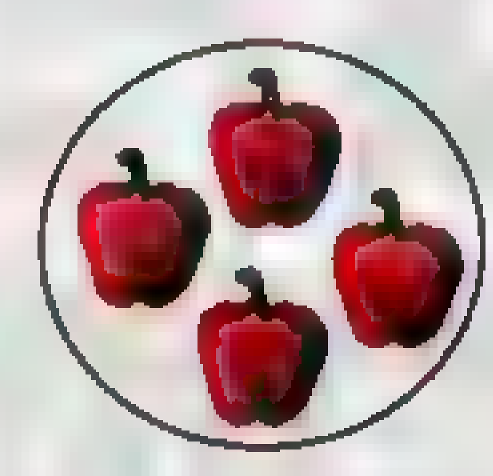
  

Repeated addition equation $3 + 3 + 3 = 9$

Multiplication equation $3 \times 3 = 9$

3 sets each with 3 turtle = 9 turtle

Activity 2 Notice :

Repeated addition equation $4 + 4 + 4 = 12$

Multiplication equation $3 \times 4 = 12$

3 sets of 4 pepper each = 12

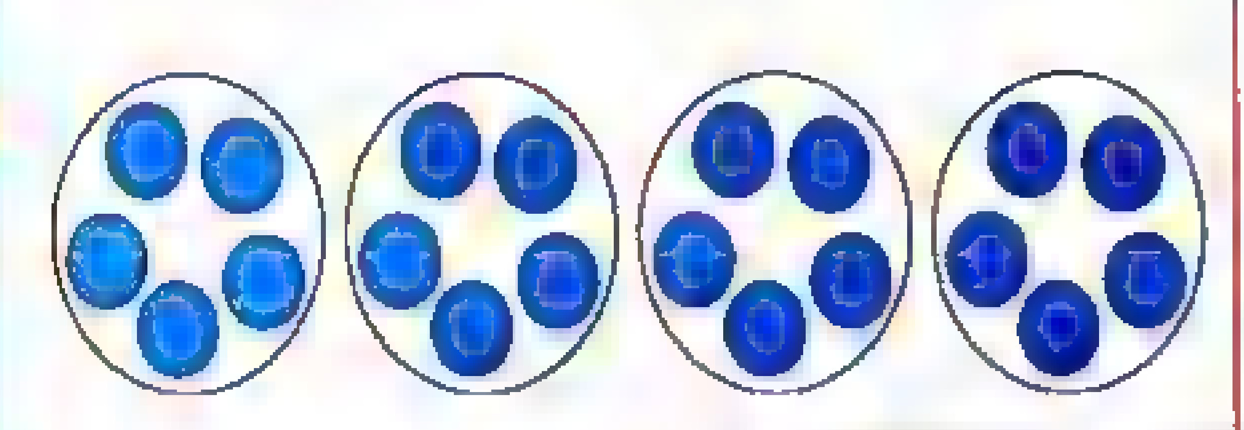


Nadeen draw 2 flowers in a paper then 2 then 2 .
How many flowers drawn ?

Repeated addition equation ___ + ___ + ___ = 6

Multiplication equation 2 × ___ = ___

Activity 3 Notice the following :



Number of sets 4

Number of items in each 5

Repeated addition =

5 + 5 + 5 + 5 = 20

It means 4 × 5 = 20

4 sets of 5 items = 20



Number of rows 4

Number of items in each 5

Repeated addition =

5 + 5 + 5 + 5 = 20

It means 4 × 5 = 20

4 rows of 5 items each = 20



Exercise 2 Notice then complete :



Number of sets ....

Number of items in each set 5

Repeated addition =

..... + ... + ... = ...

Its mean .... × ..... = 20

..... sets of ..... items = ...



Number of rows 3

Number of items in each ....

Repeated addition =

...... + ... + ... = ...

Its mean .... × ...... = ...

..... rows of ..... items each = ...

Chapter 2

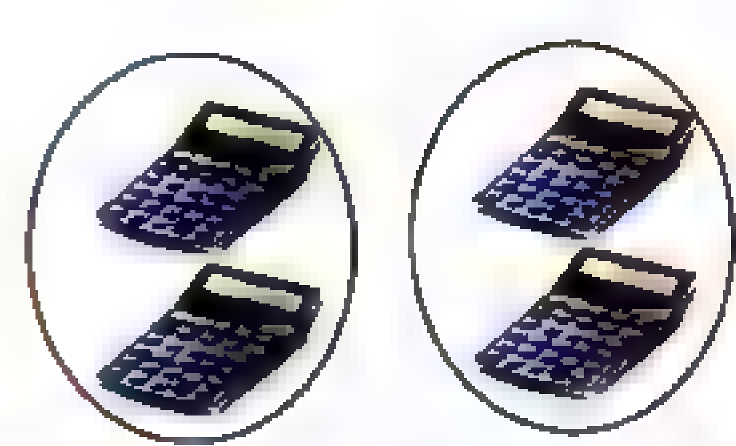




Number of rows ....

Repeated addition ....

Multiplication .... × .... = ...



Number of sets ....

Repeated addition ....

Multiplication .... × .... = ...





Number of sets ....

Repeated addition ....

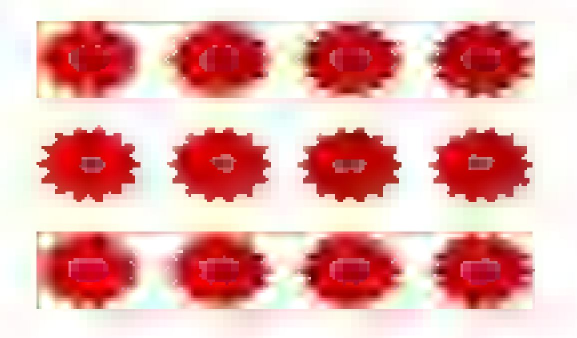
Multiplication .... × .... = ...

Number of rows ....

Repeated addition ....

Multiplication .... × .... = ...

Exercise 5 Complete :



Using Rows

Number of rows ....

Repeated addition ....

Multiplication .... × .... = ...



Using columns

Number of columns ....

Repeated addition ....

Multiplication .... × .... = ...

BAKKAR The thousands - Multiplication

Activity 4 Find 5 × 7 :

- Skip count by 7s strategy

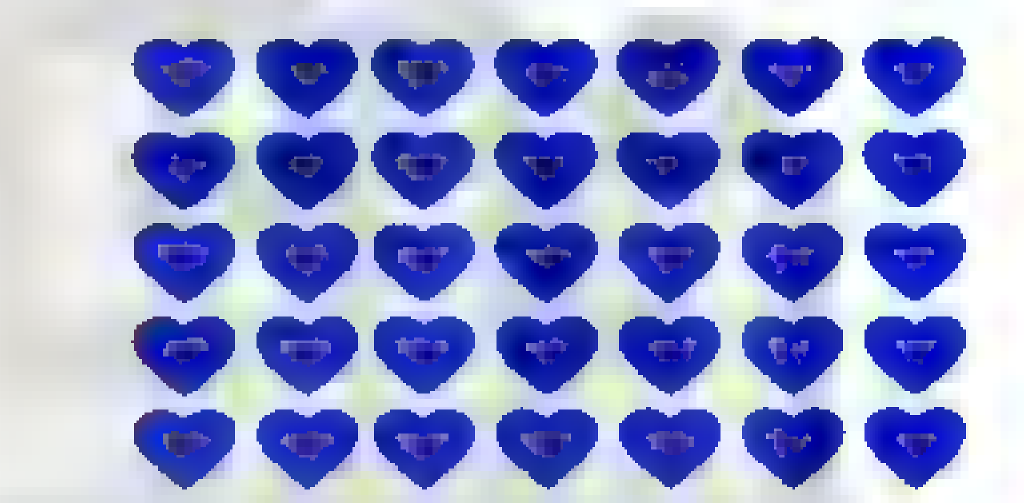


Count (7) , five time to get 35

7 + 7 + 7 + 7 + 7 = 35



- Circles and dots strategy



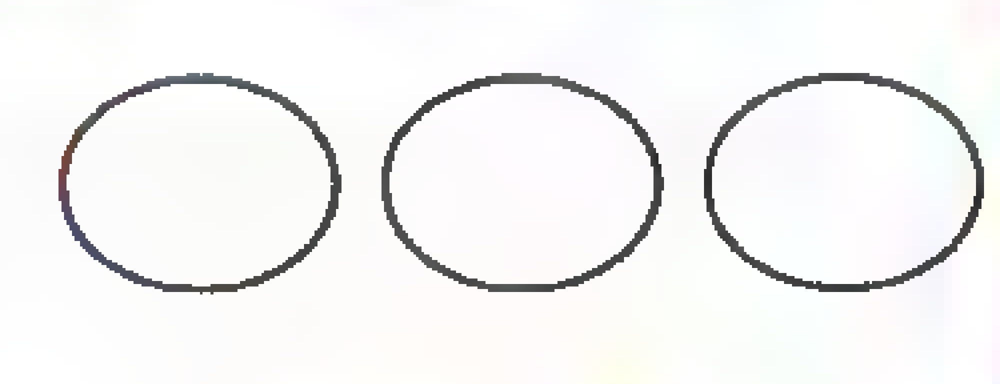
7 + 7 + 7 + 7 + 7 = 35

- Array strategy

7 + 7 + 7 + 7 + 7 = 35

Exercise 6 Find the product of 3 × 4 show your strategy :

- Skip count strategy by 4s

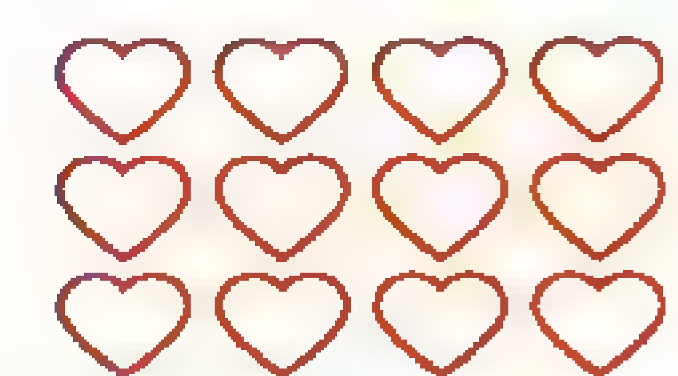


4 + 4 + 4 = ...

- Circle and dots strategy

4 + 4 + 4 = ...

- Array strategy

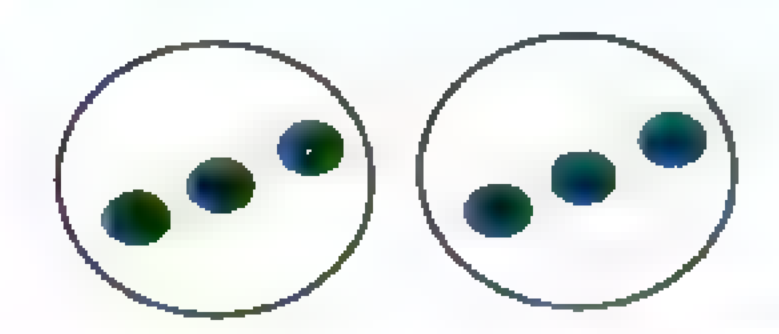


4 + 4 + 4 = ...



Self - check on lesson (17 , 18)

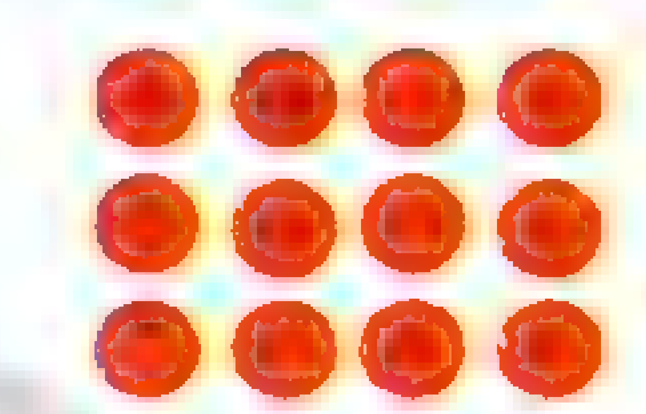
1 Write the equation of addition and multiplication :



Number of sets

Repeated addition

Multiplication × =



Number of rows

Repeated addition

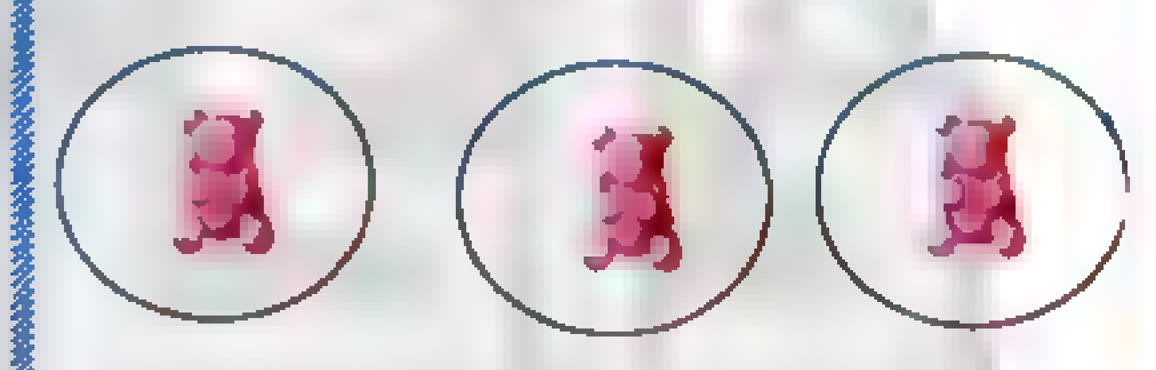
Multiplication × =



Number of rows

Repeated addition

Multiplication × =



Number of sets

Repeated addition

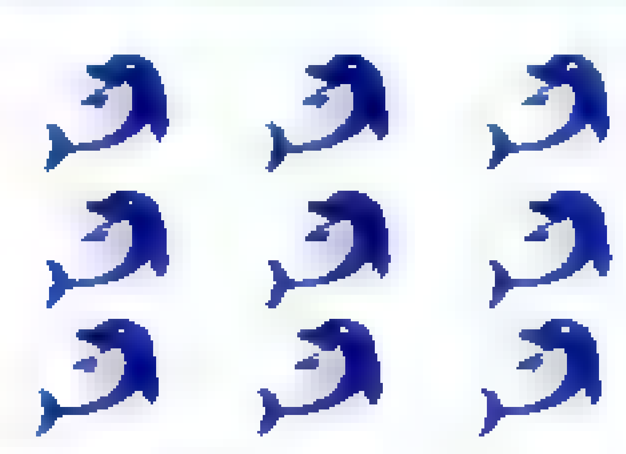
Multiplication × =



Number of rows

Repeated addition

Multiplication × =



Number of rows

Repeated addition

Multiplication × =

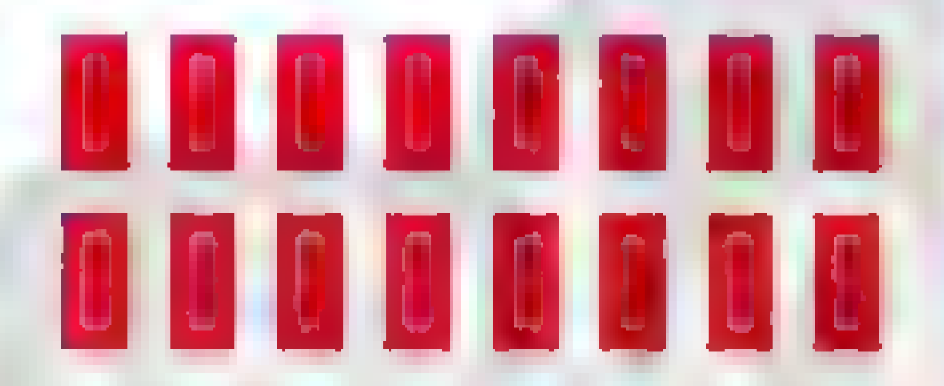
2 Find the number of all items using rows :



Number of rows
Repeated addition
Multiplication × =



Number of rows
Repeated addition
Multiplication × =



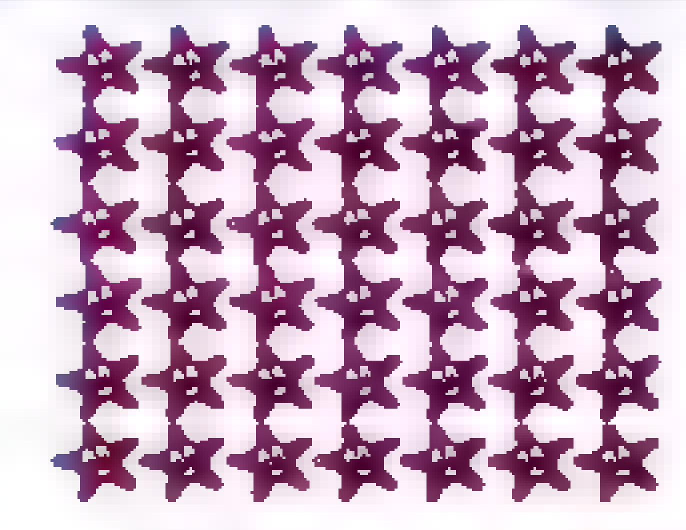
Number of rows
Repeated addition
Multiplication × =



Number of rows
Repeated addition
Multiplication × =



Number of rows
Repeated addition
Multiplication × =



Number of rows
Repeated addition
Multiplication × =

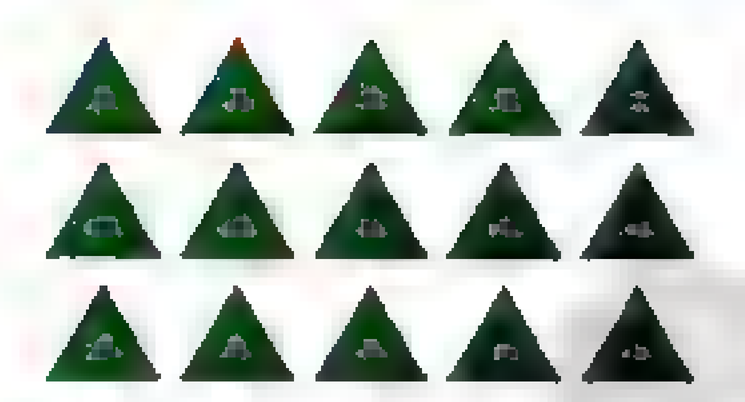


Lesson (19 , 20)

Commutative property of multiplication

Activity 1 Notice and complete :

Math Journal





Number of rows

Number of columns

Total number of items

Rows × Columns = product

...... × ...... = ...

Number of rows

Number of columns

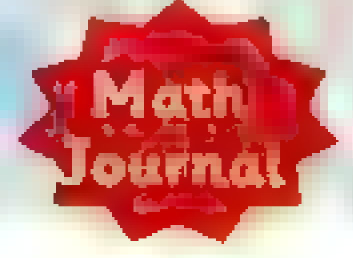
Total number of items

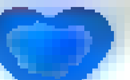
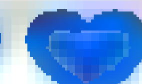
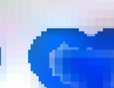
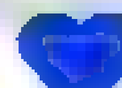
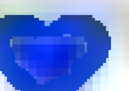
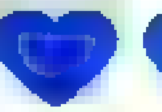
Rows × Columns = product

...... × ...... = ...

Notice commutative is verifier : 3 × 5 = 5 × 3 = 15

Activity 2 Notice and complete :



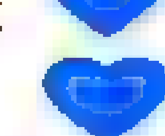
Number of rows ......

Number of columns

Total number of items

Rows × Columns = product

...... × ...... = ...



Number of rows

Number of columns

Total number of items

Rows × Columns = product

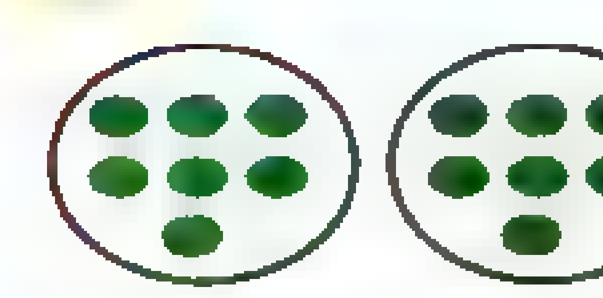
...... × ...... = ...

Notice commutative is verifier : 1 × 8 = 8 × 1 = 8

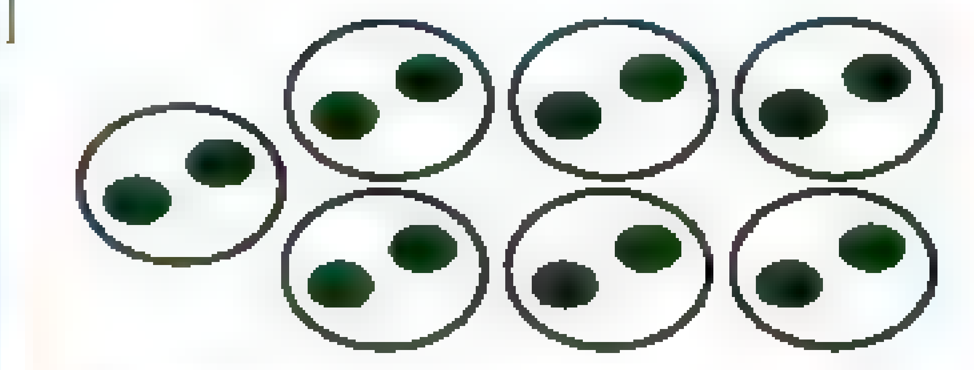
BAKKAR

The thousands - Multiplication

Exercise 1 Notice and complete :



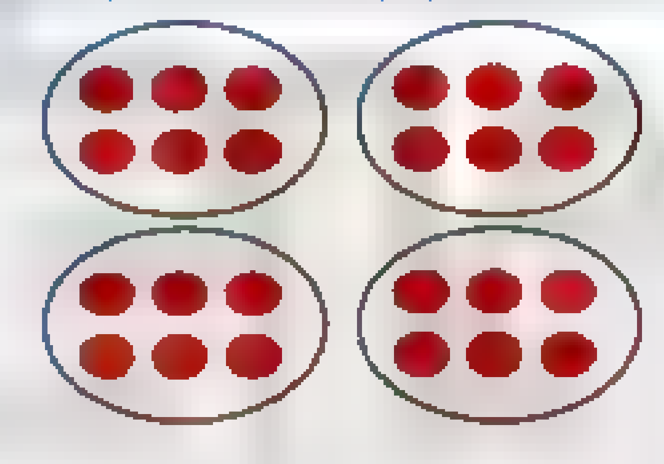
Number of circles
Number of dots
Total number ....
Circles × dots = product
× =



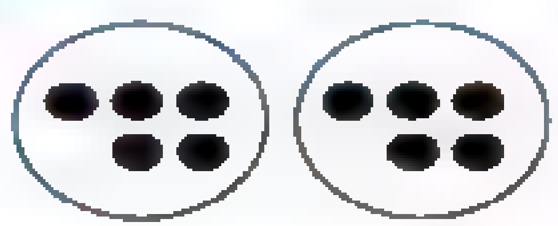
Number of circles
Number of dots
Total number
Circles × dots = product
× =



Number of circles
Number of dots
Total number
Circles × dots = product
× =



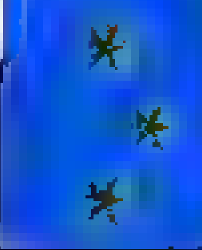
Number of circles
Number of dots
Total number ....
Circles × dots = product
× =



Number of circles
Number of dots
Total number
Circles × dots = product
× =



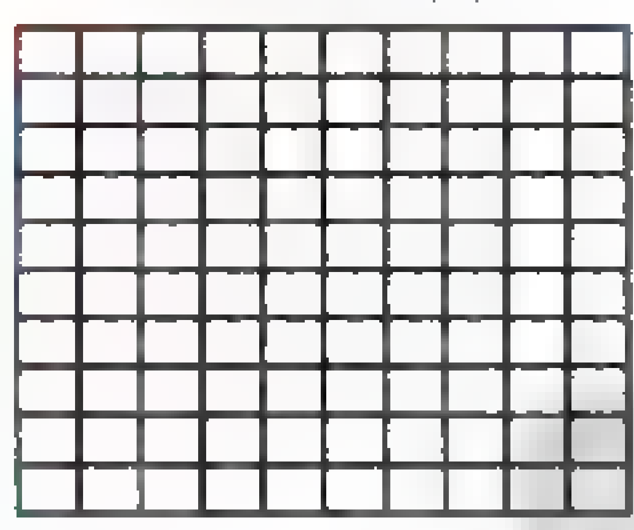
Number of circles
Number of dots
Total number
Circles × dots = product
× =



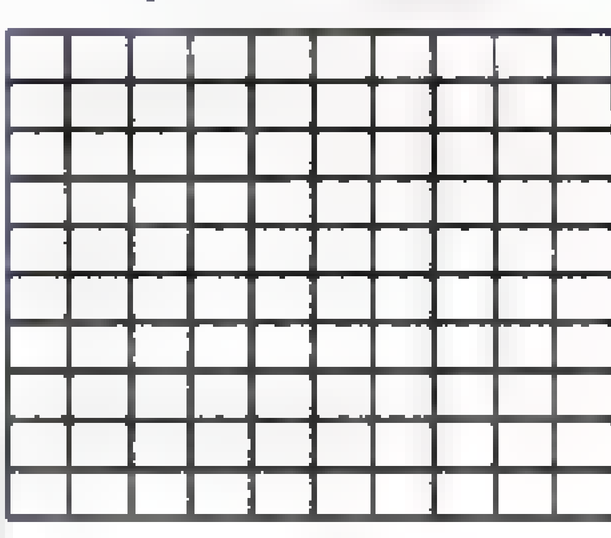
Chapter 2

Exercise 2 Draw arrays that prove the commutative property of multiplication :

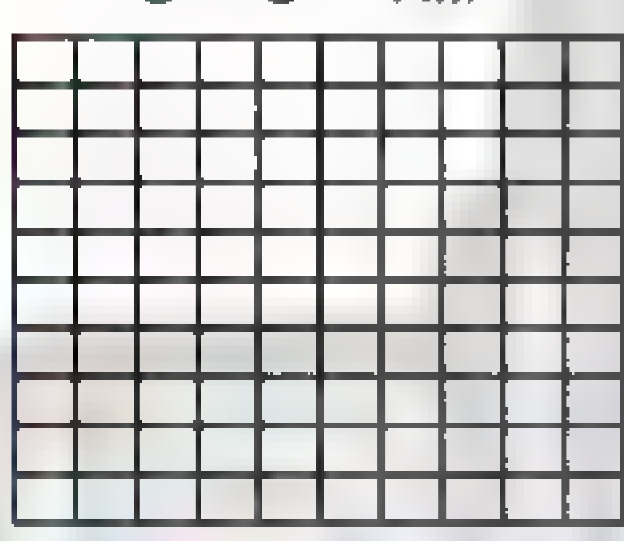
$2 \times 7 =$ ......



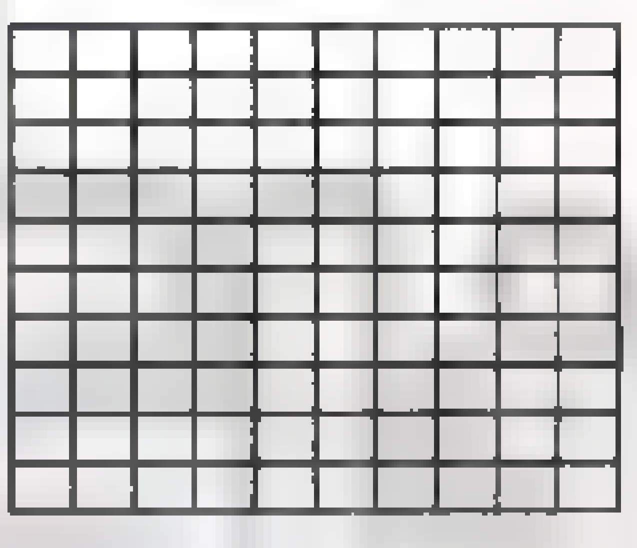
$7 \times 2 =$



$5 \times 3 =$ ......



$3 \times 5 =$ ......



Activity 3 Use a die to form array :

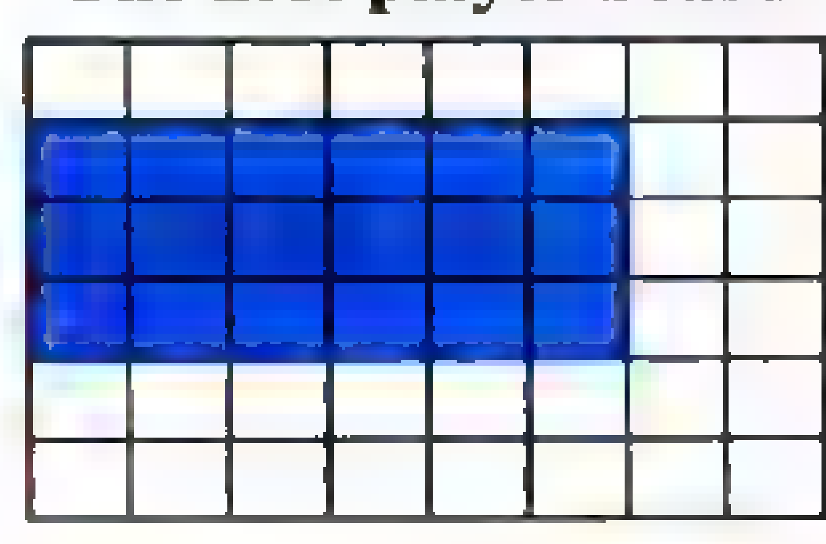
- Roll the die one time that is the number of rows.
- Roll the die second time that is the number of columns.

First roll : 3 → 3 rows.

Second roll : 6 → 6 columns.

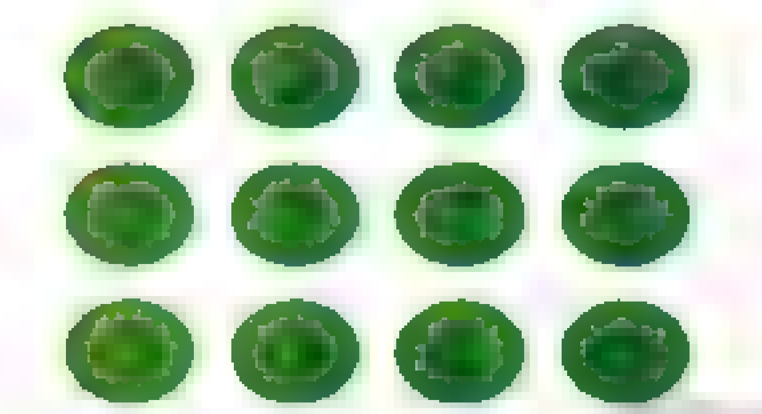
- Number of array squares = $3 \times 6 = 18$
- Number of empty squares = 30

The first player board



Self - check on lesson (19 , 20)

1 Write the multiplication and addition equation :



Number of rows

Repeated addition

Multiplication × =



Number of rows

Repeated addition

Multiplication × =



Number of rows

Repeated addition

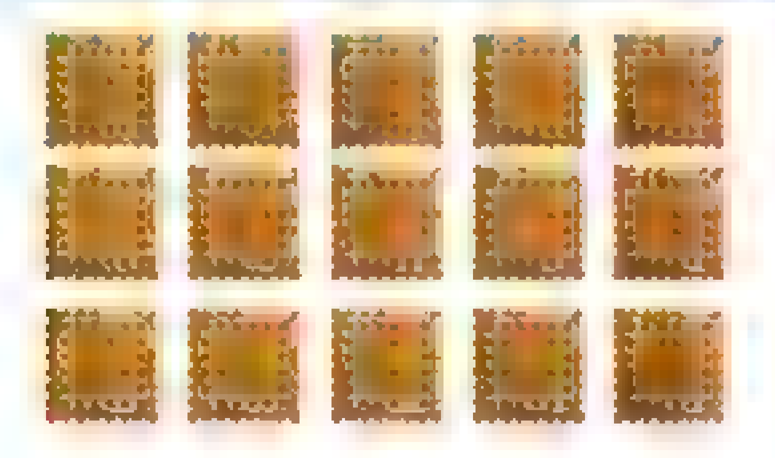
Multiplication × =



Number of rows

Repeated addition

Multiplication × =



Number of rows

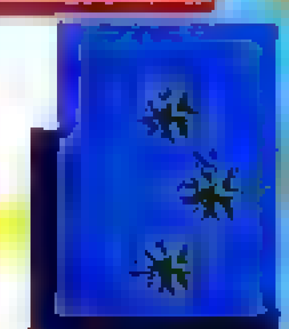
Repeated addition

Multiplication × =

Number of rows

Repeated addition

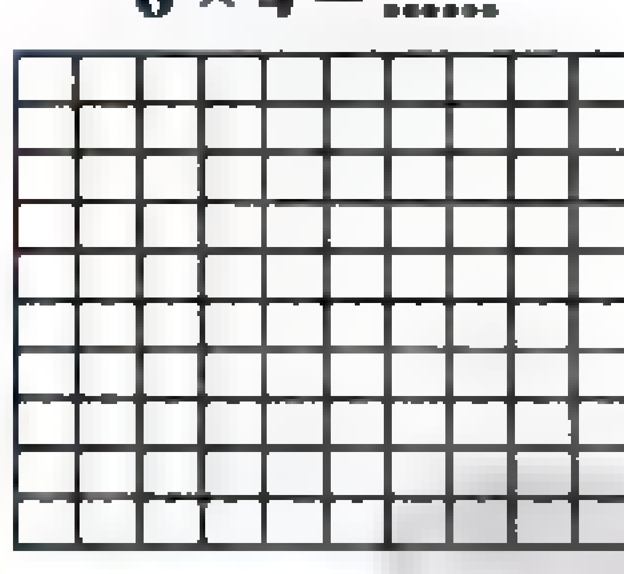
Multiplication × =

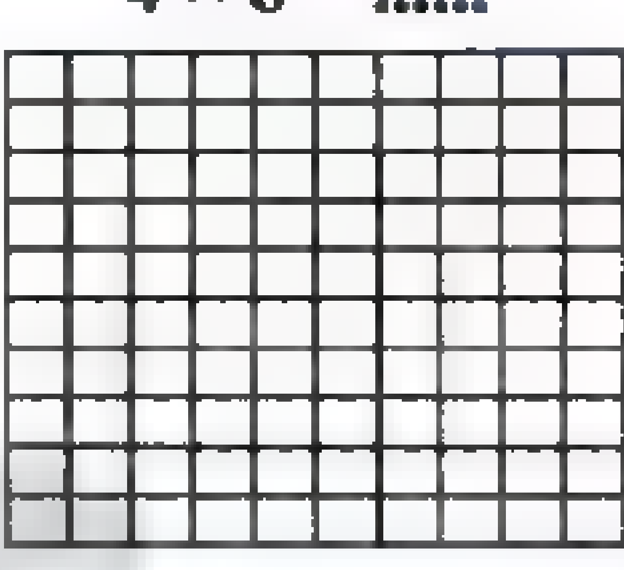
Chapter 2

2 Colour according to the multiplication :

$6 \times 4 =$ ......



$4 \times 6 =$ ......



3 Use 6 apples to make different arrays then write the multiplication equation :

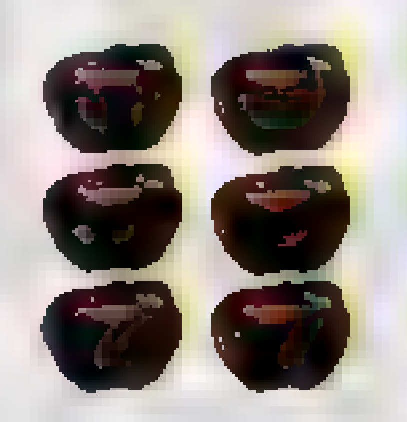


Multiplication .. × .... =

Multiplication × =



Multiplication × =



Multiplication × =

4 As the same way use 10 apples to make different arrays then write the multiplication equation :

Self - check 1 Chapters 2

1 Complete the following :

a) .... + ... + ... + 5 = 2 375

b) The place value of (5) in 29 531 is ....

c) 45 thousand = ... (standard form)

d) 5 hundreds , 3 thousands , eleven .... in digits.

e) The number just after 7 999 is ....

2 Arrange the following numbers in an ascending order :

a) 9 157 , 9 517 , 9 751 , 9 715 , 9 175

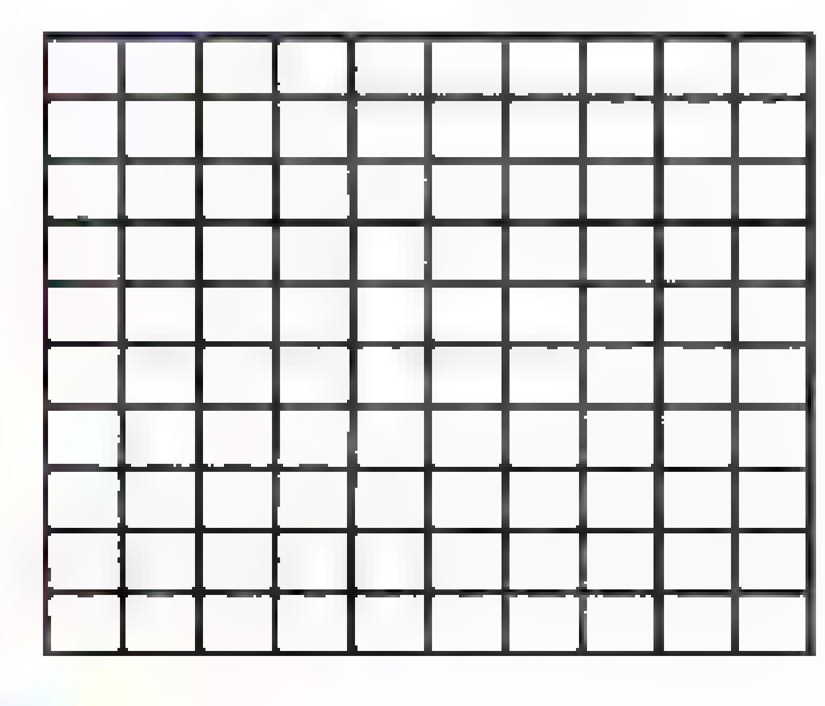
The order : ....

b) 30 003 , 30 300 , 33 000 , 30 000 , 30 303

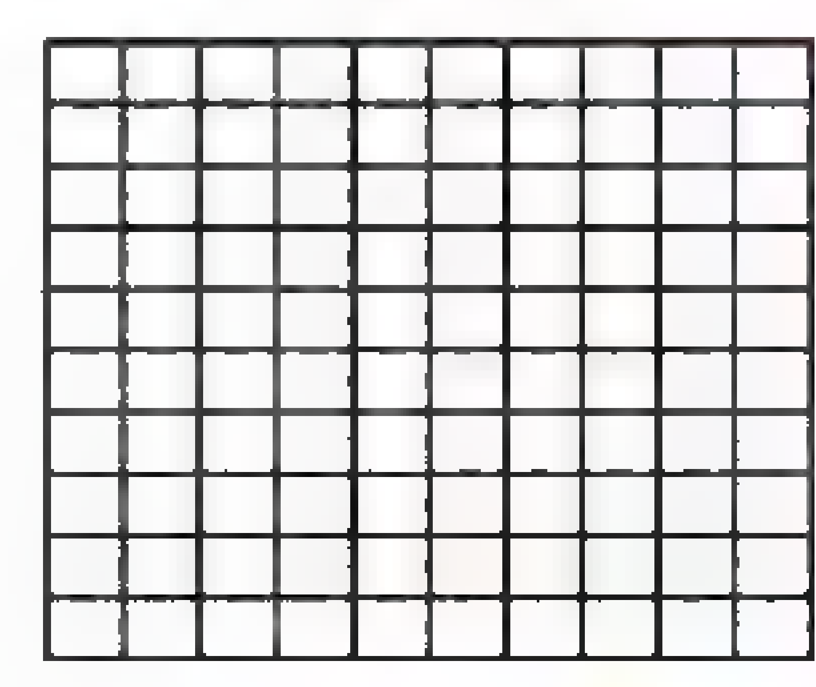
The order : ....

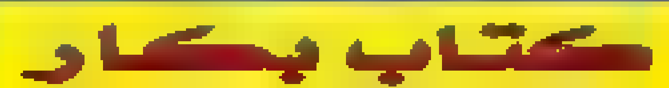
3 Colour according to the product :

$9 \times 5 =$ . ..



$5 \times 9 =$ .....





Self - check 2 Chapter 1, 2

1 Choose the correct answer :

(a) The greatest number can be formed from (0 , 1 , 3 , 9) is .... (1 390 , 9 310 , 1 039)

(b) 43 760 = 40 000 + 3000 + ... (76 , 700 , 760)

(c) The value of 7 in 17500 is ...... (70000 , 7000 , 7)

(d) 89 thousands = ... (890 , 89 000 , 98 000)

(e) The place value of (9) in 29 531 is ..... (ones , hundreds , thousand)

2 Write the equation of addition and multiplication :

Number of columns

Repeated addition

Multiplication × =

Number of raws

Repeated addition

Multiplication × =

3 Use 8 apples to make different arrays then write multiplication equation for each :

For more exercises follow the Bakkar Self-check page (210)



Multiplication facts

Key Vocabulary

A Question	مسألة
Clock	ساعة
Commutative	خاصية الإبدال
Division	القسمة
Equal	المتساوي
Equal groups	مجموعات متساوية
Every	كل
Factors	العوامل
Facts	الحقائق

Fair share	نصيب عادل
Half an hour	نصف ساعة
Minute	دقيقة
Modelling	النمذجة
Multiples	المضاعفات
Quotient	خارج القسمة
Split	تقسيم
Time	الوقت

Content

Bakkar Self-Check

Bakkar Exercise on lessons

Exercise inspired from Math Journal

Exercise inspired from Discover



Lesson (21 , 22)

Story problems on multiplying (Multiplication facts by 4)



Activity 1 Notice the difference between addition and multiplication :

(a) Amer has 3 dates and his mother gave him another 5 dates .

Number of dates with Amer = 3 + 5= 8 dates

Amer his mother



(b) Amer has 3 bags of 4 pieces of fig each .

Number of figs with Amer = 4 + 4 + 4 = 12 pieces (Addition facts)

or 3 × 4 = 12 pieces (Multiplication)



Activity 2 Answer the following :

Farha went to the store to buy Loaf for a big family dinner .
At the store, she bought 4 bags of Loafs . Each bag contained 5 Loafs.
How many Loafs did Farha buy ?

Solution

Number of Loafs = ... + ... + ... + ... = ... (Addition facts)

or ...... = 4 × ...... = 20 pieces (Multiplication) .



Exercise 1 Notice and complete the pattern :

On Samira's walk home she saw 6 cars. If each car has 4 wheels, how many wheels did she see in all ?







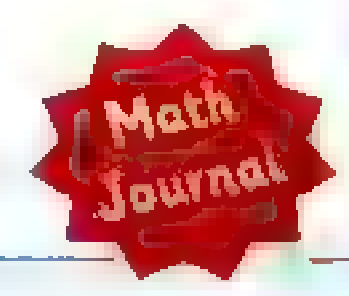

Solution

Number of wheels = ... + ... + ... + ... + ... + ... = ... wheels (Addition facts)

or ...... = 6 × ...... = 24 wheels(Multiplication)

BAKKAR

Multiplication facts



Exercise 2

Mariam had 4 sweaters . Each sweater had 3 buttons it.
How many total buttons are there on all the sweaters ?
Number of buttons = ... + ... + ... + ... = ... button
(Repeated addition)

or = 4 × .... = ... button (Multiplication)

Exercise 3

Rana packed 4 boxes full of cans . Each box had 6 cans .
How many total cans did Rana pack ?
= ...... + ... + ... + ... = ... box (Repeated addition)

or = 4 × .... = ... box (Multiplication)

Exercise 4

Amir hiked for 4 days over the summer .
Each day he hiked 7 km.
How many km did he hike in all ?
Number of km = ... + ... + ... + ... = ... km
(Repeated addition)

or = 4 × .... = ... km (Multiplication)

Exercise 5

Each pack of pencils contains 8 pencils .
How many pencils are in 4 packs ?
number of pencils = ... + ... + ... + ... = ... pencils
(repeated addition)

or = 4 × .... = ... pencils (Multiplication)



Chapter 3



Skip–count by 4s (multiples of 4)

0, 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Multiplication facts of 4

$4 \times 0 = 0$

$4 \times 1 = 4$

$4 \times 2 = 8$

$4 \times 3 = 12$

$4 \times 4 = 16$

$4 \times 5 = 20$

$4 \times 6 = 24$

$4 \times 7 = 28$

$4 \times 8 = 32$

$4 \times 9 = 36$

$4 \times 10 = 40$

$4 \times 11 = 44$

$4 \times 12 = 48$



Self - check on lesson (21 , 22)

1 Answer the following :

a) Manal brought 6 bags of cookies to school . each bag had 3 cookies in it . How many cookies were there all together ?

Number of pieces = ... = ... piece (repeated addition)

or = ... × .... = ... piece (Multiplication)

b) Sarah has picked flowers for three of her friends and wants to give each of her friend a bouquet of 4 flowers. So what is the total number of flowers that Sarah will need for all the packages ?

Number of flowers = ... = ... flower (repeated addition)

or = ... × .... = ... flower (Multiplication)

c) Malek runs 3 km each day .

How many km does he run in 7 days ?

Number of km = ... = ... km (repeated addition)

or = ... × .... = ... km (Multiplication)

d) A rocket needs 7 seconds to travel one kilometre .

How many seconds will it need to travel 4 kilometres

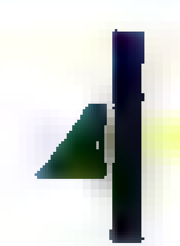
Number of seconds = ... = ... second (repeated addition)

or = ... × .... = ... second (Multiplication)

e) A bag of oranges holds 4 oranges ,how many oranges are in 8 bags ?

Number of oranges = ... = ... orange (repeated addition)

or = ... × .... = ... orange (Multiplication)




Chapter 3

2 Answer the following :

(a) $4 \times 5 =$ ....

(b) $4 \times 9 =$ ....

(c) $4 \times 2 =$ ....

(d) $4 \times 7 =$ ....

(e) $4 \times 6 =$ ....

(f) $4 \times 1 =$ ....

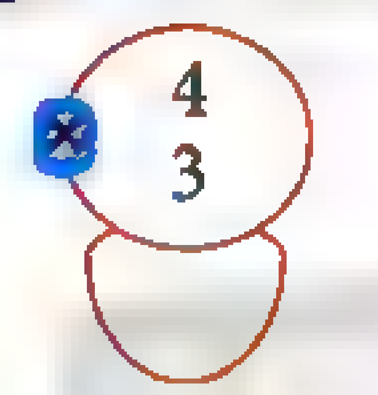
(g) $4 \times 8 =$ ....

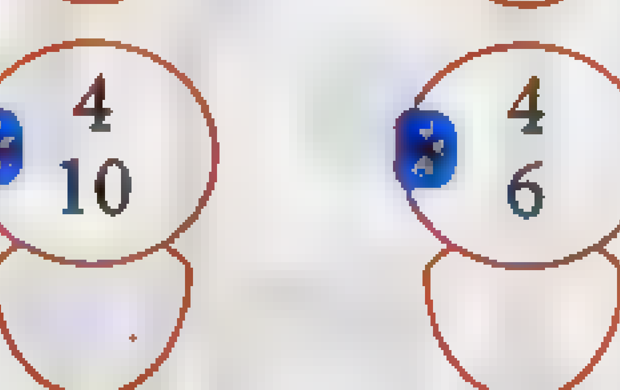
(h) $4 \times 12 =$ ....

(i) $4 \times 3 =$ ....

(j) $4 \times 4 =$ ....

3 Answer the following :

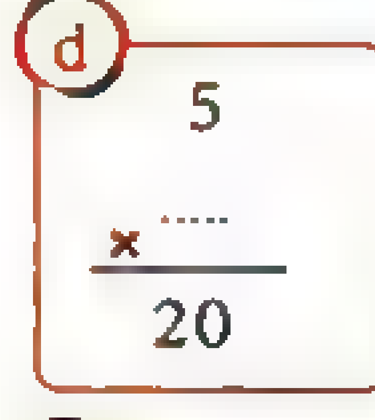



×	4	4	4	4	4
	3	7	2	9	11
	.....	.....	.....	.....	.....

×	4	4	4	4	4
	8	10	6	5	4
	.....	.....	.....	.....	.....

4 Write the missing number :



(a) ...... × 4 = 36

(b) 6 × ...... = 24

(c) ...... × 4 = 8

(d) 5 × ...... = 20

(e) 4 × .... = 12

(f) ...... × 4 = 16

(g) 4 × ...... = 28

(h) .... × 1 = 4





(23) Multiples

Multiplication facts of 2 & 3

Activity 1 Notice :

any number × 0 = 0	8 × Zero = Zero , 8 + Zero = 8
any number × 1 = The number itself	8 × 1 = 8 , 9 = 1 + 8

Multiplying × 0	Multiplying × 1
1 × 0 = 0	1 × 1 = 1
2 × 0 = ...	2 × 1 = ...
3 × 0 = ...	3 × 1 = ...
4 × 0 = ...	4 × 1 = ...
5 × 0 = ...	5 × 1 = ...
6 × 0 = ...	6 × 1 = ...
7 × 0 = ...	7 × 1 = ...
8 × 0 = ...	8 × 1 = ...
9 × 0 = ...	9 × 1 = ...
10 × 0 = ...	10 × 1 = ...
11 × 0 = ...	11 × 1 = ...
12 × 0 = ...	12 × 1 = ...

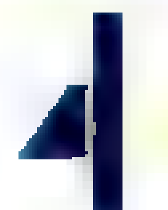
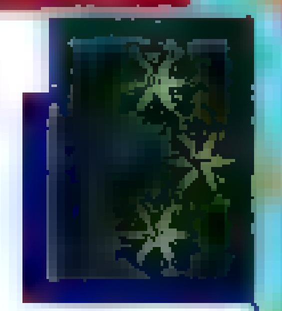
Activity 2 Notice the difference :

also :

215 × 0 = 0	215 × 1 = 215
37 × 0 = 0	37 × 1 = 37
103 × 0 = 0	103 × 1 = 103
9417 × 0 = 0	9417 × 1 = 9417





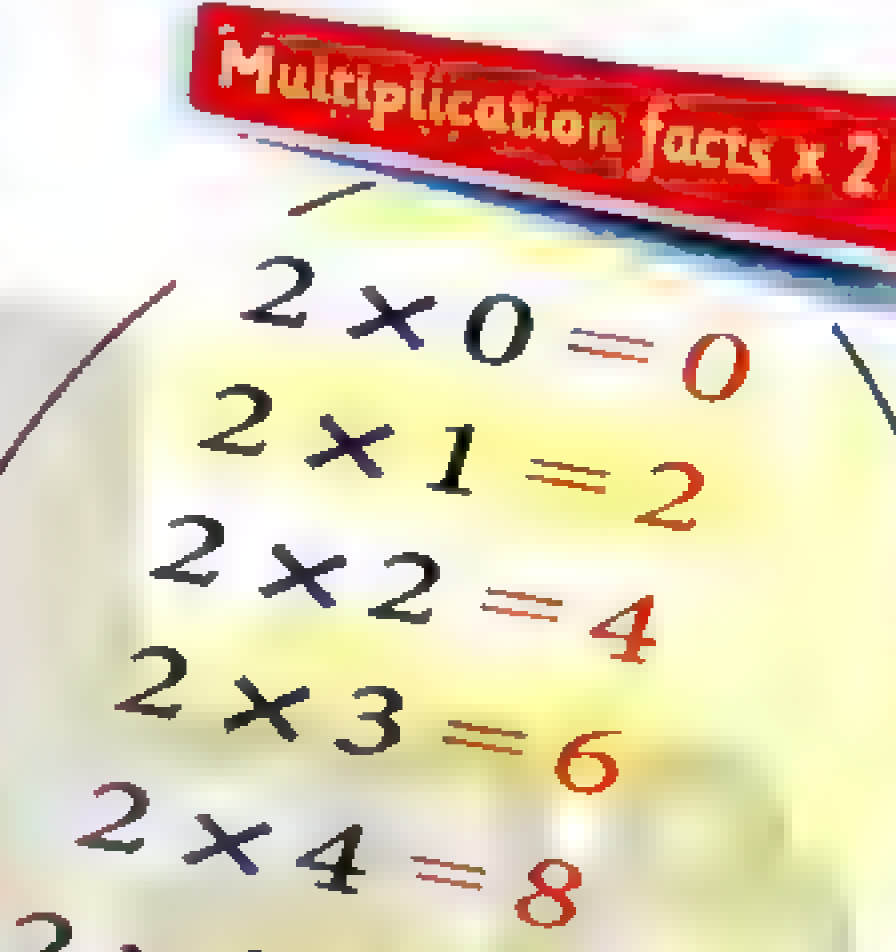
Chapter 3

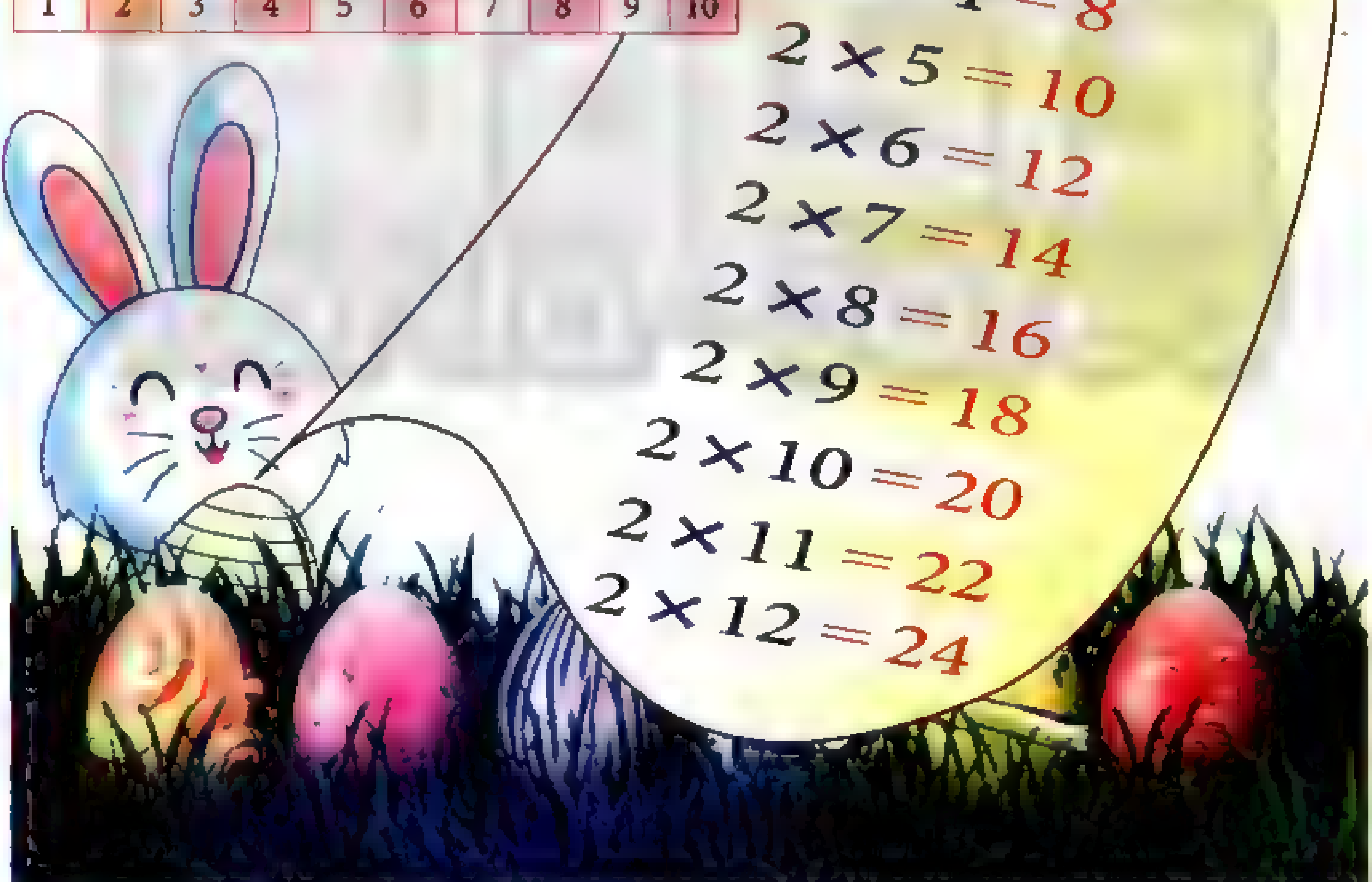


Skip-count by 2s (multiples of 2)

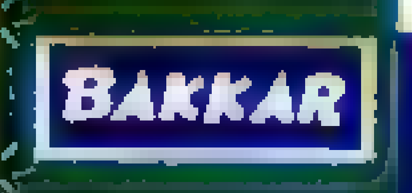
0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10









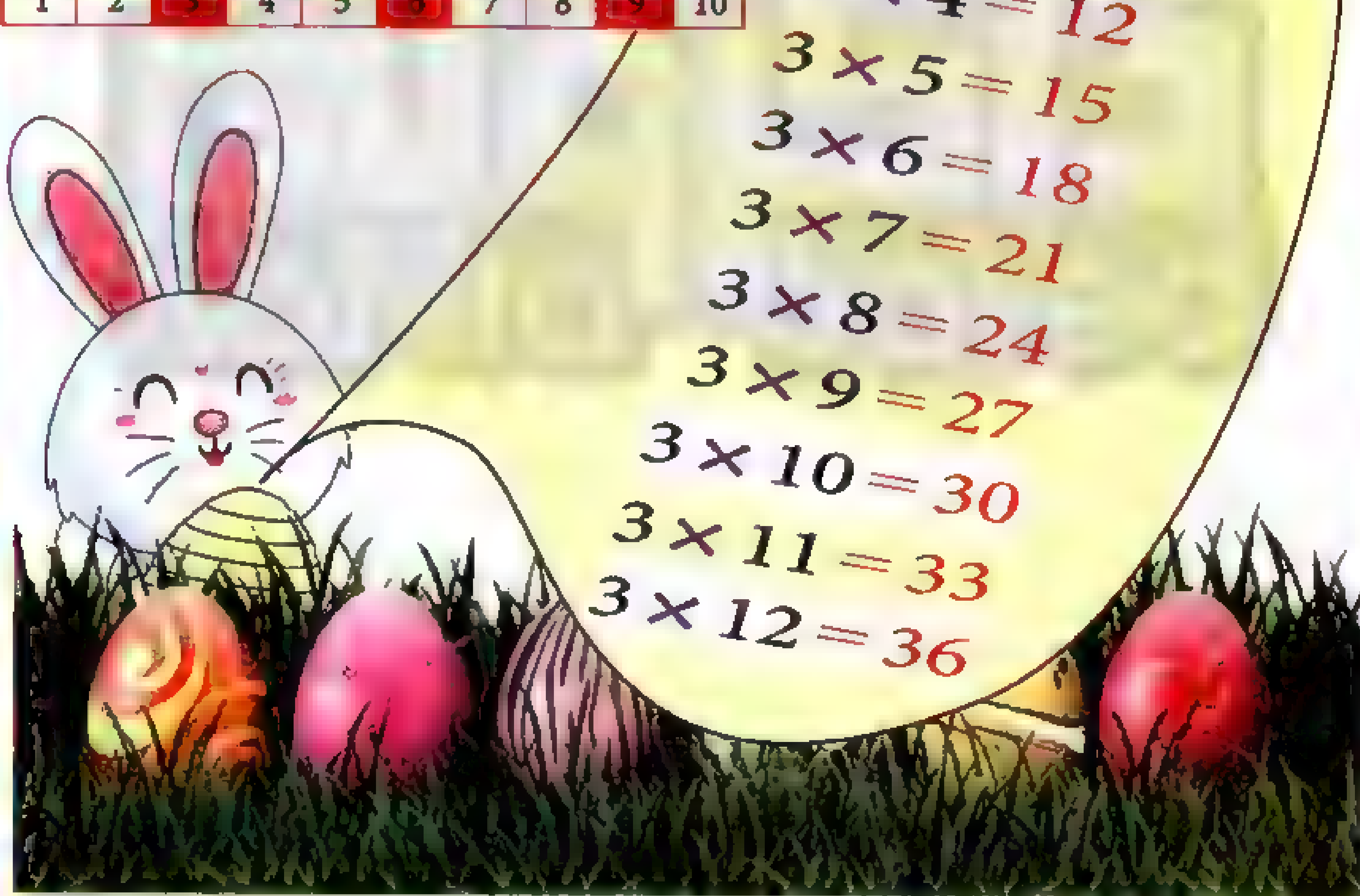
Multiplication facts

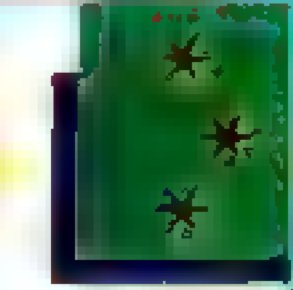


Skip-count by 3s (multiples of 3)

0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10





Chapter 3

Activity 3 From the common multiples for 2 and 3 :

The common factors : 0 , 6 , 12 , 18 , 24 , ______________ , 120

a) All of factor are even numbers

b) Skip-count by 6s

c) Write a multiple for 2 and 3 and more than 120 .

The solution : the multiple is 126

Exercise Answer the following :

a) How many wings are there in 9 birds ?

Solution Number of wings = ... ×

= .... wings

b) The price of a doll is LE 8 .

What is the price of 2 dolls ?

Solution Price of 2 dolls = ... ×

= .... pounds

c) If every student has to plant two trees in a school garden as a beauty school activity.
How many trees planted by 7 students?

Solution Number of trees = ... ×

= .... trees

d) Gerges bought 3 kg of dates with 6 pounds each kg. What is the price of the dates?

Solution The price of the dates = ... ×

= .... pounds



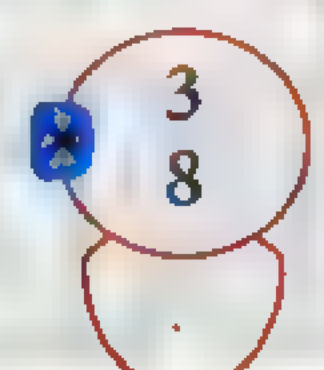
Self - check on lesson (23)

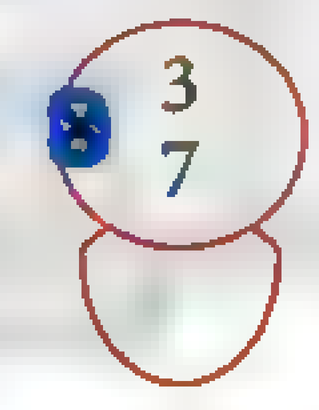
1 **Find the product of the following :**

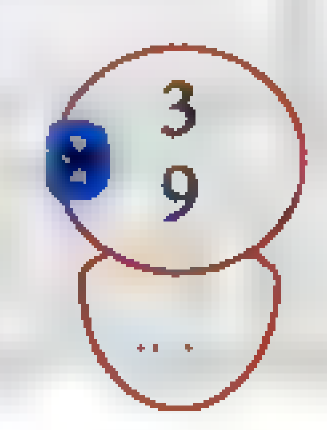
a	3 × 0 = ...	b	3 × 2 = ...
c	3 × 9 = ...	d	3 × 6 = ...
e	3 × 11 = ...	f	3 × 8 = ...
g	3 × 4 = ...	h	3 × 5 = ...
i	3 × 7 = ...	j	3 × 12 = ...
k	3 × 3 = ...	l	3 × 1 = ...

2 **Complete the following :**



















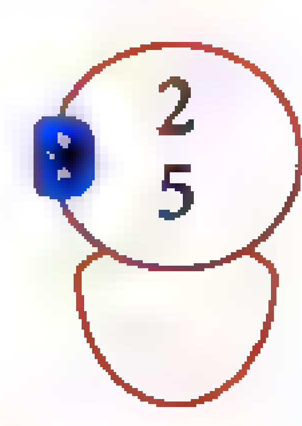






× 2 8

× 1 2







Chapter 3



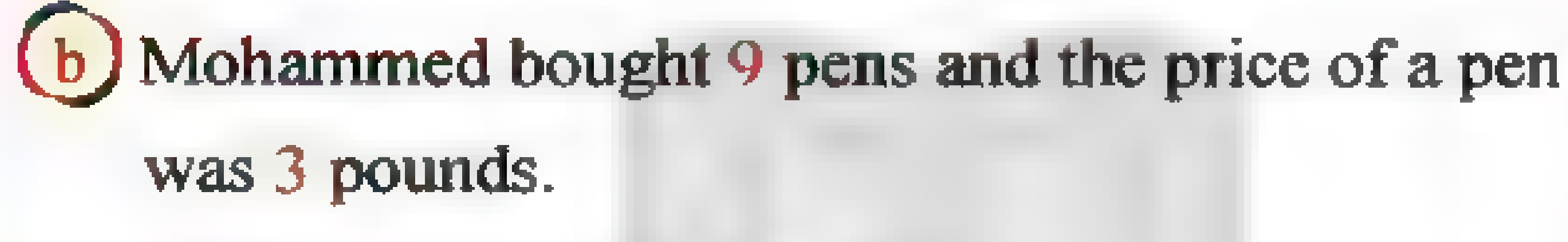
3 Answer the following :



a) If the box of cheese has 8 pieces , how many pieces in 3 boxes ?

Solution Number of pieces = ... × 8

= .... pieces.



b) Mohammed bought 9 pens and the price of a pen was 3 pounds.

How much are the pens cost ?

Solution The price of the pens = ... × 9

= .... pounds.



c) How many days in 2 weeks ?

Solution Number of days in 2 weeks = 2 ×

= days.

d) How many legs are there in 3 chickens ?

Solution Number of legs = 3 × ____

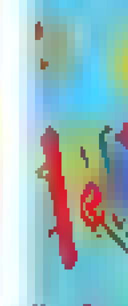
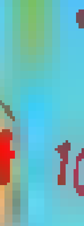
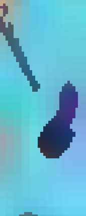
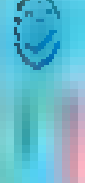
= .... legs.

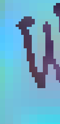


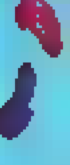
e) If the fan has 3 feather , find the number of feather in 5 fans:

Solution Number of feathers = ____ × ____

= ____ feather .









BAKKAR — Multiplication facts



4 Complete using ($<$, $>$, $=$)

- (a) 3×1 ☐ 4
- (b) 2×8 ☐ 8
- (c) 3×4 ☐ 12
- (d) 3×7 ☐ 20
- (e) 3×5 ☐ 14
- (f) 12×0 ☐ 12
- (g) 1×4 ☐ 5
- (h) $3 + 7$ ☐ 2×3

5 Complete using (+ , × , -)

- (a) 3 ☐ 7 = 21
- (b) 7 ☐ 3 = 10
- (c) 7 ☐ 3 = 4
- (d) 3 ☐ 0 = 0
- (e) 2 ☐ 5 = 10
- (f) 2 ☐ 5 = 7
- (g) 5 ☐ 2 = 3
- (h) 3 ☐ 9 = 12
- (i) 3 ☐ 9 = 27
- (j) 8 ☐ 3 = 24
- (k) 3 ☐ 0 = 3
- (l) 3 ☐ 4 = 7



(24)

- First -
Multiples of numbers 5 , 10



Skip–count by 5s (multiples of 5)

0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Multiplication facts x 5

$5 \times 0 = 0$

$5 \times 1 = 5$

$5 \times 2 = 10$

$5 \times 3 = 15$

$5 \times 4 = 20$

$5 \times 5 = 25$

$5 \times 6 = 30$

$5 \times 7 = 35$

$5 \times 8 = 40$

$5 \times 9 = 45$

$5 \times 10 = 50$

$5 \times 11 = 55$

$5 \times 12 = 60$



Multiplication facts



Skip-count by 10s (multiples of 10)

0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Multiplication facts x 10

$10 \times 0 = 0$

$10 \times 1 = 10$

$10 \times 2 = 20$

$10 \times 3 = 30$

$10 \times 4 = 40$

$10 \times 5 = 50$

$10 \times 6 = 60$

$10 \times 7 = 70$

$10 \times 8 = 80$

$10 \times 9 = 90$

$10 \times 10 = 100$

$10 \times 11 = 110$

$10 \times 12 = 120$



Self - check on lesson (24 - First)

1 Find the product of the following :

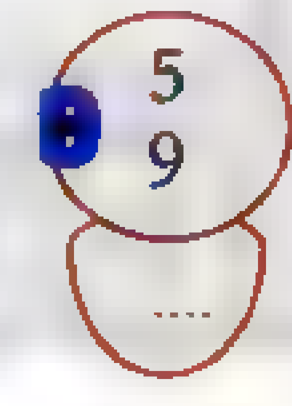
(a) 5 × 0 = ...
(b) 10 × 2 = ...
(c) 10 × 1 = ...
(d) 5 × 11 = ...
(e) 5 × 4 = ...
(f) 5 × 5 = ...
(g) 5 × 6 = ...
(h) 10 × 5 = ...
(i) 10 × 8 = ...
(j) 5 × 10 = ...
(k) 10 × 6 = ...
(l) 10 × 3 = ...

2 Complete the following :

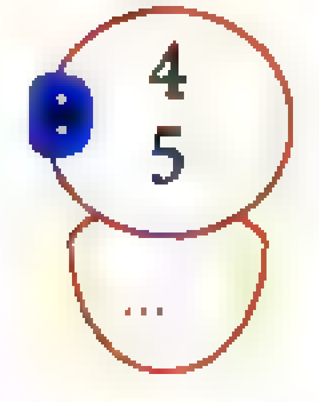


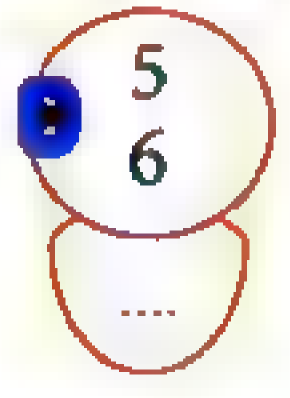




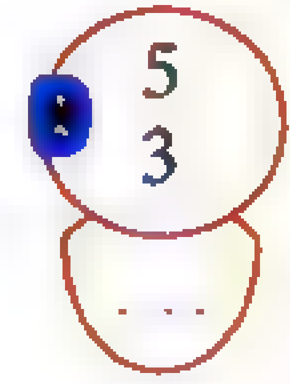






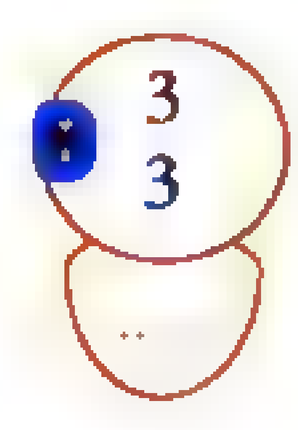


5
5









4
2

3
0

1
2



Multiplication facts

3 Write the missing number :

(a) 3 × .... = 30
(b) .... × 5 = 50
(c) 10 × .... = 60
(d) .... × 6 = 36
(e) 2 × .... = 18
(f) 5 × .... = 20

4 Look at the lest price then complete :









Rice	oil	bread	lentil	cheese
5 LE	9 LE	1 LE	10 LE	4 LE

(a) The price of 5 bottles of oil = 5 × .... = ... ponds

(b) The price of 5 kilogram of lentil = 5 × .... = ... ponds

(c) The price of 8 kilogram of rice = 8 × .... = ... ponds

(d) The price of 10 boxes of cheese = 10 × .... = ... ponds

(e) The price of 4 loaves of bread = 4 × .... = ... ponds



Lesson (24)

-Second- multiplication facts of 7



Activity 1 Skip-count by 7s
Complete the multiplication facts of 7

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Multiplication facts x 7

$7 \times 0 = 0$
$7 \times 1 = 7$
$7 \times 2 = \ldots$
$7 \times 3 = 21$
$7 \times 4 = \ldots$
$7 \times 5 = \ldots$
$7 \times 6 = \ldots$
$7 \times 7 = \ldots$
$7 \times 8 = \ldots$
$7 \times 9 = \ldots$
$7 \times 10 = 70$
$7 \times 11 = \ldots$
$7 \times 12 = 84$

Self - check on lesson(24 -Second)

1 From the multiplication facts complete :

(a) $7 \times 6 =$ ......
(b) $7 \times 7 =$ ......
(c) $4 \times 7 =$ ......
(d) $7 \times 1 =$ ......
(e) $7 \times 0 =$ ......
(f) $7 \times 2 =$ ......
(g) $7 \times 3 =$ ......
(h) $7 \times 8 =$ ......
(i) $7 \times 5 =$ ......
(j) $7 \times 4 =$ ......
(k) $3 \times 8 =$ ......
(l) $2 \times 5 =$ ......

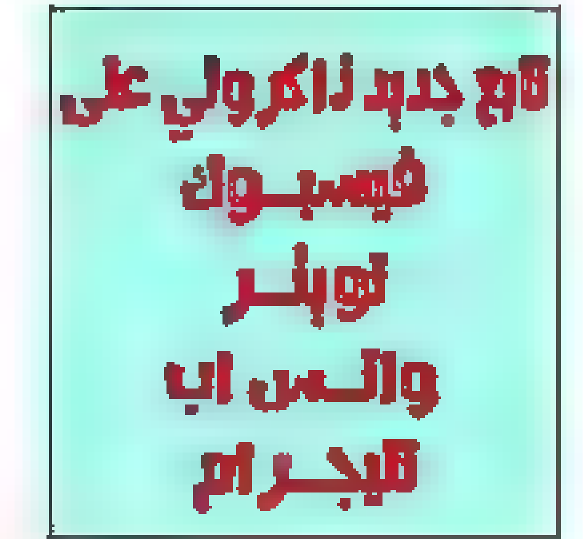
2 Complete the following :

7	7	7	7	7
× 7	× 5	× 1	× 9	× 4
......	......	......	......	......

7	7	7	7	7
× 6	× 0	× 3	2 ×	× 8
......	......	......	......	......

3 Complete in the same pattern :

(a) 0 , 7 , 14 , ... , ... , ...
(b) 63 , 56 , 49 , ... , ... , ...
(c) 28, ... , 42 , 49 , ... , ...
(d) 49, 42, ..., ... , 21 ,





Chapter 3

4 Complete using (+ , × , -) :

(a) 7 ◯ 1 = 8
(b) 7 ◯ 1 = 6
(c) 7 ◯ 1 = 7
(d) 7 ◯ 7 = 49
(e) 7 ◯ 0 = zero
(f) 7 ◯ 0 = 7
(g) 3 (×) 7 = 20 ◯ 1
(h) 3 ◯ 7 = 9 ◯ 1
(i) 7 ◯ 2 = 20 ◯ 6
(j) 7 ◯ 2 = (2 × 7)

5 Answer the following :

(a) Savings are a great business, if Kenzy saves 3 pounds daily .
How many pounds do Kenzy save in a week ?

Solution What Kenzy save in a week = 3 × .... = ... pounds .

(b) If the worker works 7 hours a day for 6 days a week .
How many hours does he work per week ?

Solution Number of hours = ... × .... = ... hours .

(c) How many days in 9 weeks ?



Solution Number of days = ... × 9 = ... days .

(d) The third primary class pupils stood in 7 rows in each row
5 students . How many pupils in the class ?

Solution Number of pupils = 7 × .... = ... pupils .



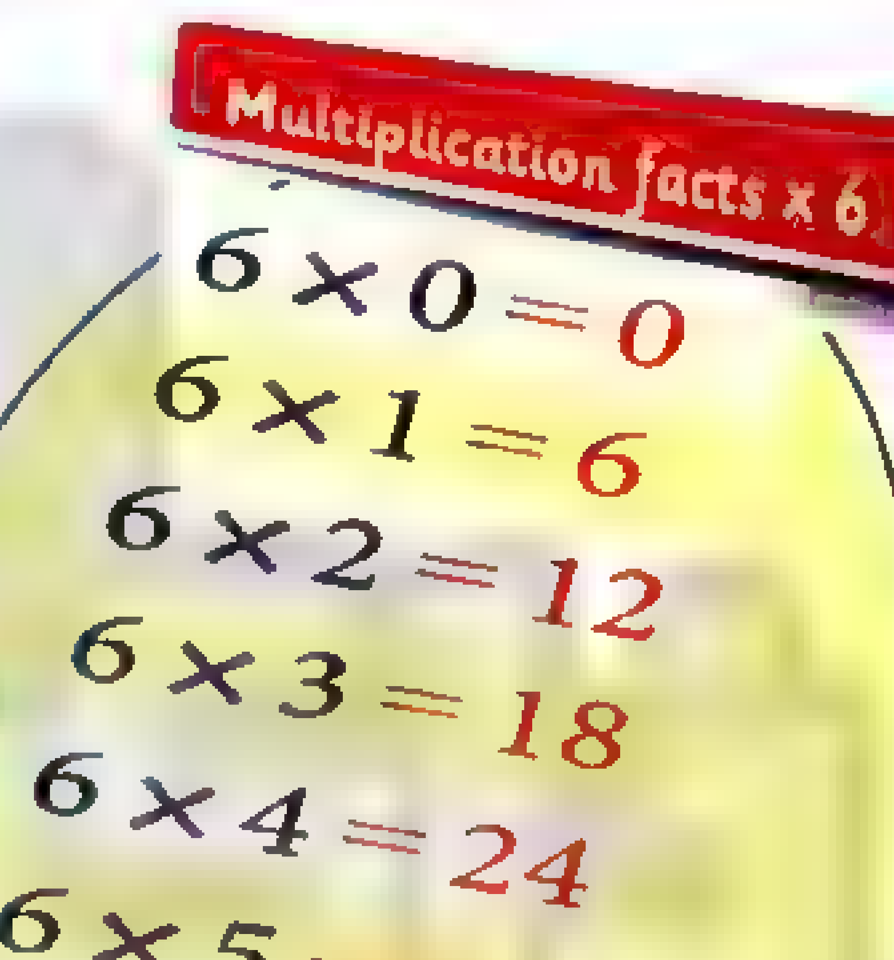
Lesson (25)

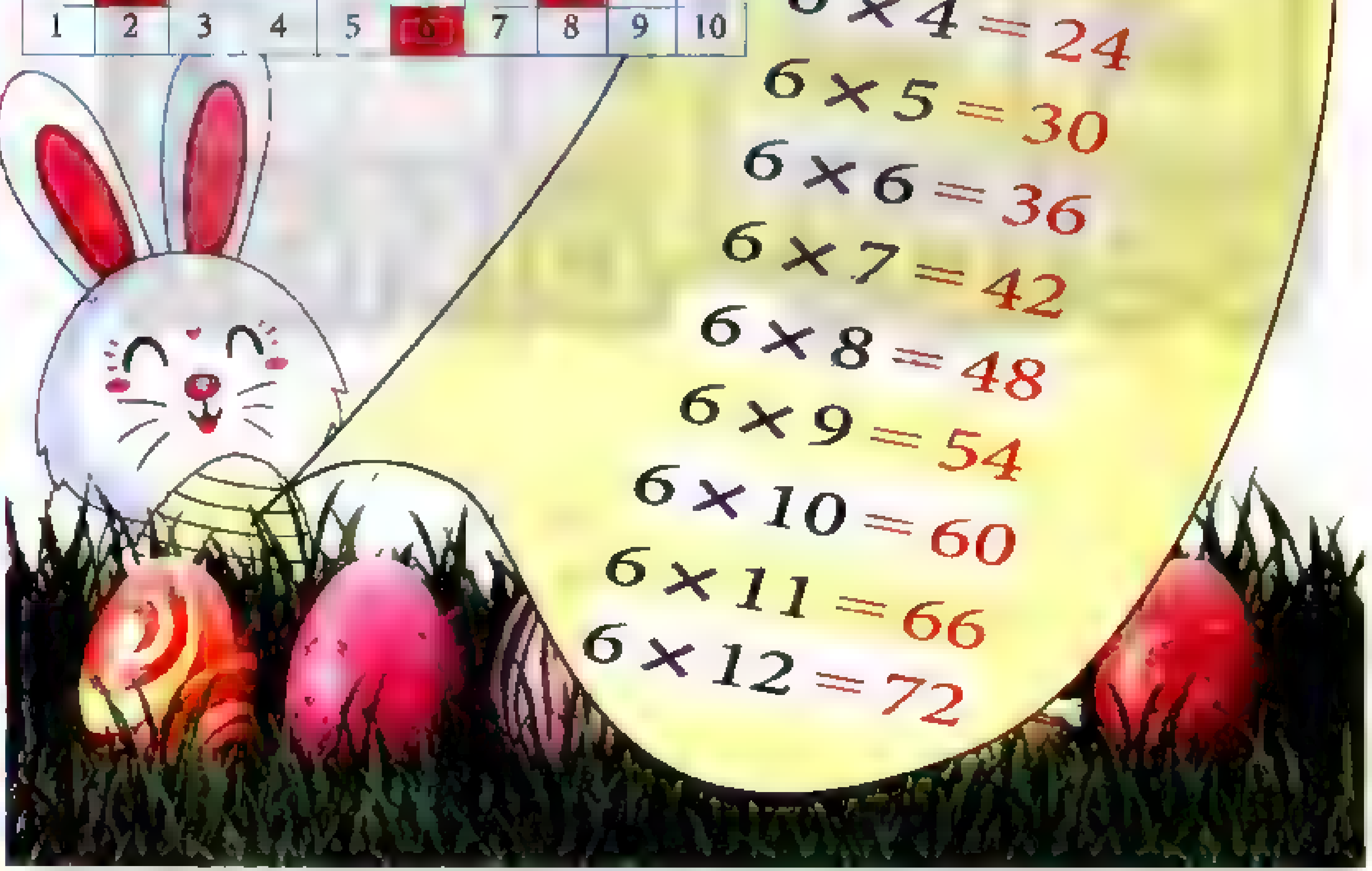
First : multiplication facts × 6
Factorizing the number into two factors

Skip-count by 6s (multiples of 6)

0 , 6 , 12 , 18 , 24 , 30 , 36 , 42 , 48 , 54 , 60 , 66 , 72

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10







Chapter 3



Activity 1 From 6 chair make all possible arrays and write the factors of 6 :



Two rows with 3 chair

2 × 3 = 6



one row with 6 chair

1 × 6 = 6



Six rows with 1 chair

6 × 1 = 6



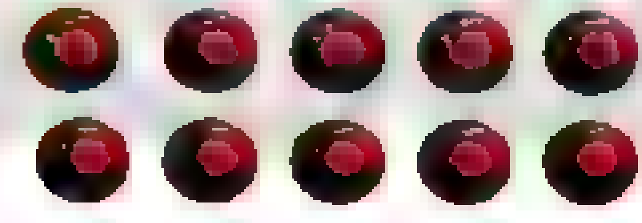
Three rows with 2 chair

3 × 2 = 6

Factors of 6 : 1 ,2 ,3 ,6

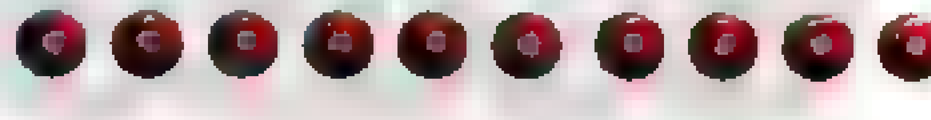


Exercise 1 From 10 balls make all possible arrays and write the factors of 10 :



Two rows with 5 balls

2 × 5 = ...



one row with 10 balls

1 × 10 = ...

Ten rows with 1 balls

10 × 1 = ...



Five rows with 2 balls

5 × 2 = ...

Factors of 10 : ...... , ... , ... , ...

BAKKAR

Multiplication facts

Exercise 2 From 8 chair make all possible arrays :

* one row with 8 chair
$1 \times 8 = 8$
× × × × × × × ×

* Two rows with 4 chair
$2 \times 4 = 8$
× × × ×
× × × ×

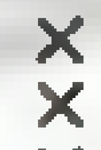
* Four rows with 2 chair
$4 \times 2 = 8$
× ×
× ×
× ×
× ×

* Eight rows with 1 chair
$8 \times 1 = 8$
×
×
×
×
×
×
×
×

Factors of 8 : ...... , ... , ... , ...

Exercise 3 From 9 chair make all possible arrays :

* one row with 9 chair
$1 \times 9 = 9$
× × × × × × × × ×

* Nine rows with 1 chair
$9 \times 1 = 9$

×
×
×
×
×
×
×

×

* Three rows with 3 chair
$3 \times 3 = 9$
× × ×
× × ×
× × ×

Factors of 9 : ...... , ... , ...

Self - check on lesson(25 -First)

1 From multiplication facts complete the following :

(a) $6 \times 6 =$ ...... (b) $6 \times 7 =$ ......

(c) $5 \times 5 =$ ...... (d) $6 \times 1 =$ ......

(e) $6 \times 0 =$ ...... (f) $6 \times 2 =$ ......

(g) $6 \times 3 =$ ...... (h) $6 \times 8 =$ ......

(i) $6 \times 5 =$ ...... (j) $6 \times 4 =$ ......

(k) $3 \times 7 =$ ...... (l) $4 \times 5 =$ ......

2 Complete the following :

$\begin{array}{r} 6 \\ \times\ 3 \\ \hline \end{array}$ $\begin{array}{r} 6 \\ \times\ 6 \\ \hline \end{array}$ $\begin{array}{r} 6 \\ \times\ 5 \\ \hline \end{array}$ $\begin{array}{r} 6 \\ \times\ 0 \\ \hline \end{array}$ $\begin{array}{r} 6 \\ \times\ 1 \\ \hline \end{array}$

$\begin{array}{r} 6 \\ \times\ 7 \\ \hline \end{array}$ $\begin{array}{r} 6 \\ \times\ 4 \\ \hline \end{array}$ $\begin{array}{r} 6 \\ \times\ 9 \\ \hline \end{array}$ $\begin{array}{r} 6 \\ \times\ 2 \\ \hline \end{array}$ $\begin{array}{r} 6 \\ \times\ 8 \\ \hline \end{array}$

3 Complete using [< , = , >] :

(a) 6×6 ☐ 6×5 (b) 6×2 ☐ 6×3

(c) 6×1 ☐ 6×0 (d) 6×5 ☐ 5×6

(e) 6×8 ☐ 6×9 (f) $(5 \times 5) + 5$ ☐ $(6 \times 6) - 6$

BAKKAR

Multiplication facts

4 Write two factors to get the following as in(a):

- a) Their product 8 The two factors are (1, 8) or (2, 4)
- b) Their product 12 The two factors are ....
- c) Their product 20 The two factors are ....
- d) Their product 10 The two factors are ....
- e) Their product 15 The two factors are ....

5 Answer the following :

a) Hassan study every day for 5 hours. He goes out with his family on Friday for a walk .
How many hours does Hassan study in a week ?

Solution The number of days of the week = ... days
The number of study days = ... days
The number of studying hours per day = ... hours
The number of studying hours per week = ... × ...
= ... hours

b) Mary bought six books , the price of one book is 4 pounds .
Find the price of all books ?

Solution The price of books = ... × ...
= .... Pounds.

c) Basem bought 7 books for 6 pounds each , so what is the price of what he paid ?

Solution Total what he paid = ... × ...
= .... Pounds



Lesson (25)

Second : multiplication facts × 8
Factorizing the number into two factors

Activity 1 By using Skip-count by 8s on 120 chart complete multiplication facts × 8

Skip–count by 8s (multiples of 8)

0 , 8 , ... , ... , ... , ... , ... , ... , ... , ... , ... , ... ,

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Multiplication facts × 8

$8 \times 0 = 0$

$8 \times 1 =$

$8 \times 2 =$

$8 \times 3 =$

$8 \times 4 =$

$8 \times 5 =$

$8 \times 6 =$

$8 \times 7 =$

$8 \times 8 =$

$8 \times 9 =$

$8 \times 10 =$

$8 \times 11 =$

$8 \times 12 =$

BAKKAR

Multiplication facts

Factorizing the number into two factors

Activity 2 Write the factors of number 9 :

9

1 × 9   3 × 3

Factors of number 9 : 1, 3, 9

Exercise 1 Complete the factors of the number :

14

1 × ......   2 × ......

Factors of number 14 are : ......

10

1 × ......   2 × ......

Factors of number 10 are : ......

22

×   ×

Factors of number 22 are : ......

15

×   ×

Factors of number 15 are : ......

18

Factors of number 18 are : ......

12

Factors of number 12 are : ......

Self - check on lesson (25 - Second)

1 Answer the following :

ⓐ 8 × 6 = ... ⓑ 8 × 7 = ...

ⓒ 8 × 4 = ... ⓓ 8 × 1 = ...

ⓔ 8 × 0 = ... ⓕ 8 × 5 = ...

ⓖ 8 × 3 = ... ⓗ 8 × 8 = ...

2 Complete :

8 × 0	8 × 6	8 × 1	8 × 3	8 × 8
......	......	......	......	......
8 × 5	8 × 4	8 × 7	8 × 2	8 × 9
......	......	......	......	......
6 × 0	7 × 3	8 × 10	5 × 4	3 × 3
......	......	......	......	......

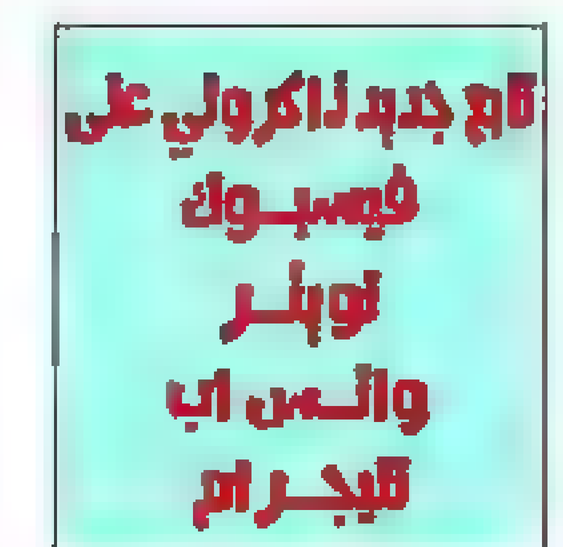
3 Complete with the same pattern :

ⓐ 8 , 16 , 24 , ... , ...

ⓑ 64 , ... , 48 , ... , 32

ⓒ 40 , 48 , ... , 64 , ...

ⓓ 40 , 32 , ... , ... , 8





BAKKAR

Multiplication facts

4 Complete using [<, =, >] :

(a) 8×6 ☐ 50
(b) 8×0 ☐ 1
(c) 8×5 ☐ 40
(d) 8×1 ☐ 8
(e) 8×3 ☐ 20
(f) 6×3 ☐ 20
(g) 8×2 ☐ 10
(h) 7×5 ☐ 45
(i) 8×7 ☐ 56
(j) 7×7 ☐ 48

5 Answer the following :

(a) How many days in 8 weeks?

Solution Number of days = 8 × .... = ... days .

(b) If a family consumes 6 bottles of water per day,
How many bottles do you consume in 8 days?

Solution Number of litres = ... × .... = ... bottles

(c) If the box of cheese contains 8 pieces of cheese triangles,
How many pieces are in 9 boxes?

Solution Number of pieces = 8 × .... = ... pieces

(d) If the number of legs in one chair is 4 legs,
How many legs are there in 8 chairs?

Solution The number of legs in 8 chairs = ... × ....

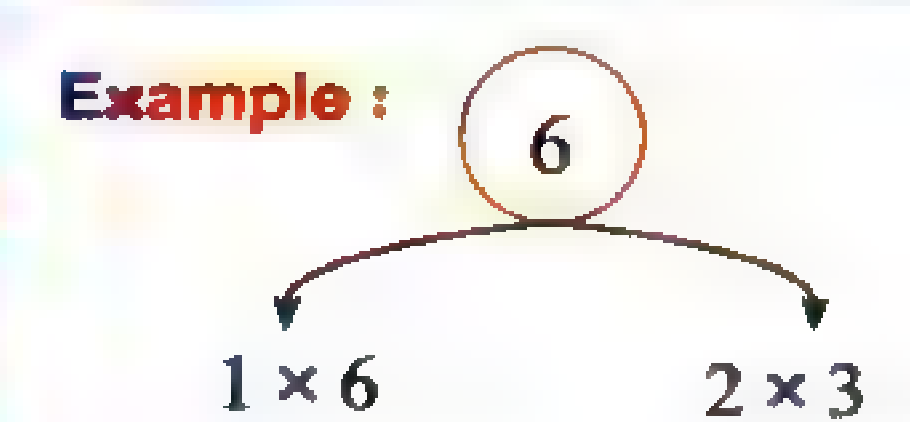
= .... legs



Chapter 3

6 Complete the factors of the number as **Ex** :

Example :



Factors of number 6 are : 1, 2, 3, 6



Factors of number 8 are :



Factors of number 35 are :



Factors of number 21 are :



Factors of number 20 are :



Factors of number 16 are :

7 Complete the Factors of the number :

Number	Factors of number	Number of Factors
5	1, 5	2
4		
11		
26		
28		

Lesson (26 , 27) The time



Activity 1 Notice the shaded part of the watch :

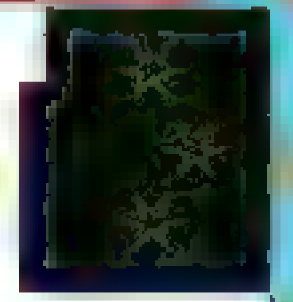
Quarter of an hour = 15 minutes	Half an hour = 30 minutes	Quarter to an hour = 45 minutes	1 hour = 60 minutes

Activity 2 Notice the time shown :

4 : 00	4 : 15	4 : 30	4 : 45

Exercise 1 Draw hands according to the time :

2 : 00	2 : 15	2 : 30	2 : 45



Chapter 3

Activity 3 Notice the pattern :



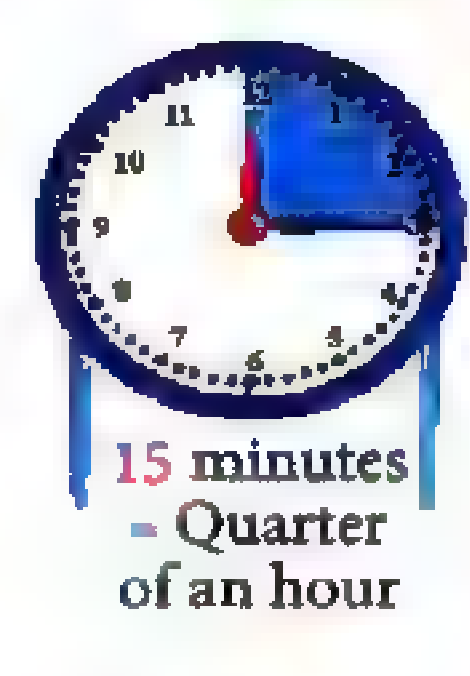
Beginning of counting Time



5 minutes



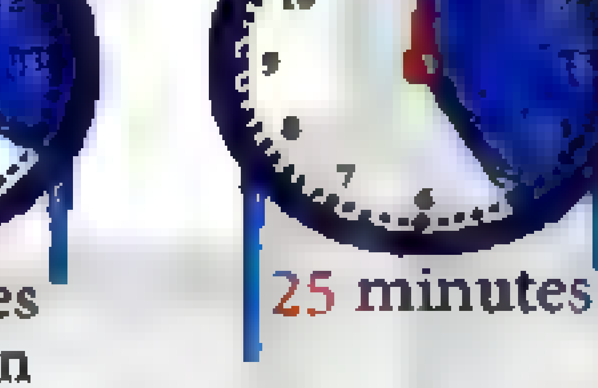
10 minutes



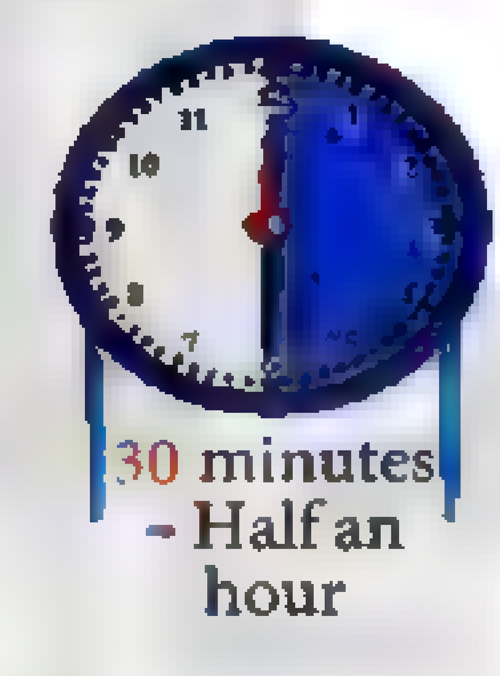
15 minutes = Quarter of an hour



20 minutes third of an hour



25 minutes



30 minutes = Half an hour



35 minutes



40 minutes



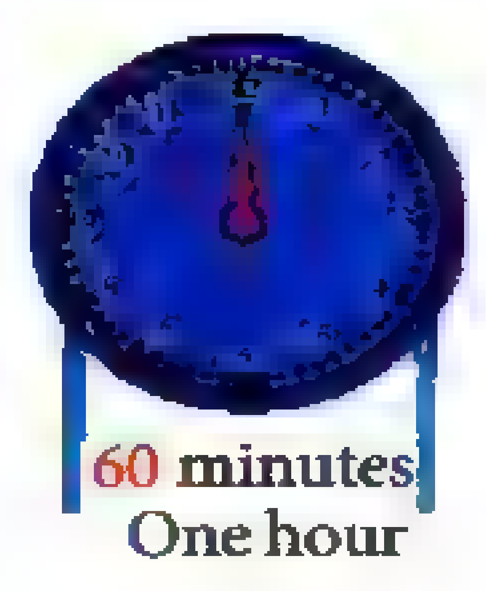
45 minutes



50 minutes



55 minutes



60 minutes One hour



BAKKAR

Multiplication facts

Activity 4 Notice the time :

8 :00
Eight o'clock

Time	Reading
8 :05	Its : 5 past Eight
8 :10	Its : 10 past Eight
8 :15	Its : quarter past Eight
8 : 20	Its : 20 past Eight
8 : 25	Its : 25 past Eight
8 :30	Its : half past Eight
8 :35	Its : 35 past Eight
8 :40	Its : 20 to 9
8 :45	Its : quarter to nine
8 :50	Its : 10 to 9
8 :55	Its : 5 to 9
9 :00	Its : Nine o'clock

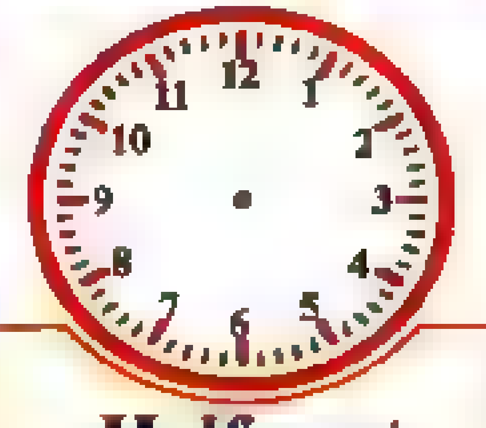




Chapter 3

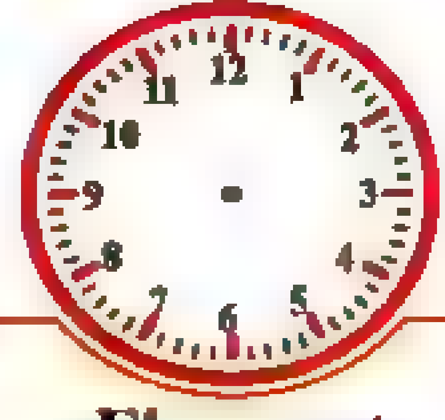


Activity 5 Draw hands according to the time :

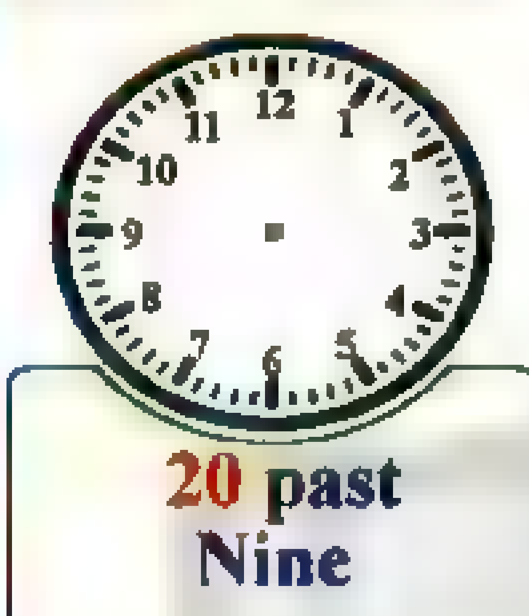


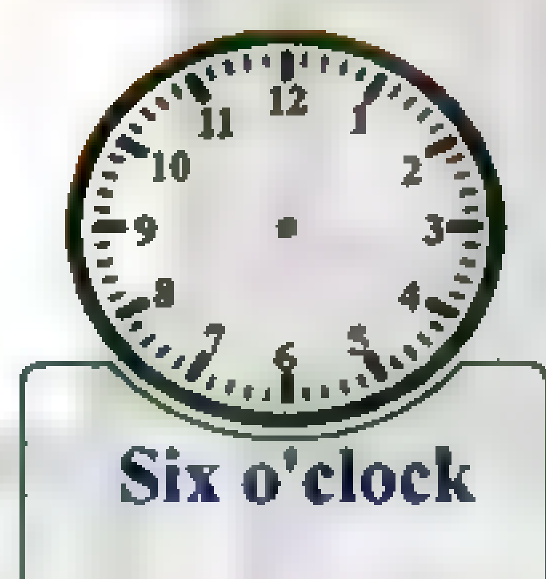




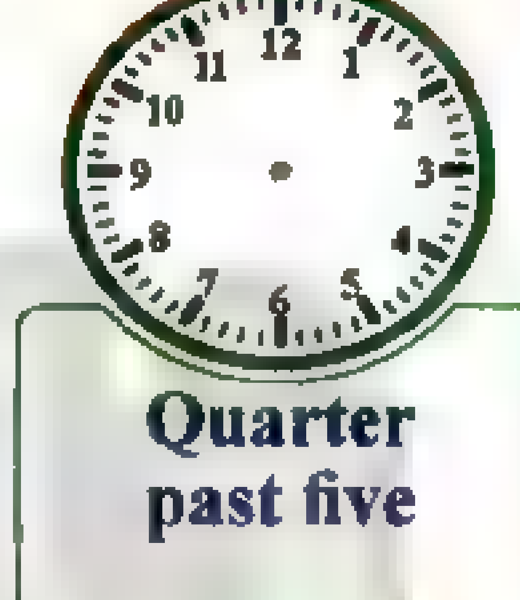


Half past two	Seven and 50 minutes	Quarter past four	Five past Eleven





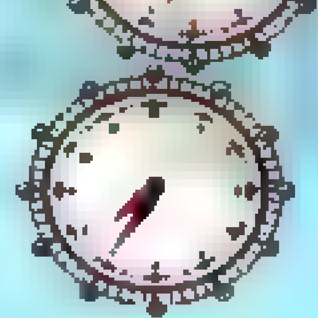




20 past Nine	Six o'clock	Ten past Eleven	Quarter past five



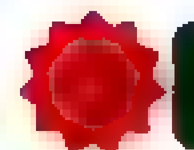
Activity 6 Mohammed go out at  In the morning ,

he arrived at school at  .

The time he spent = ... minutes .

Exercise 2

Hisham sat for lunch at  . It took 20 minutes to eat food . Draw the two hands on the clock shown the new time .

Multiplication facts

Activities from Math Journal

Activity 1 The mother put the cookies in the oven at 7:00 and when she removed the cookies, the hour looked like the picture , How many minutes did it take cakes ?

Solution The time = ... minutes .

Activity 2 She leaves school at 3:00 pm, and when she gets home the time was as the picture. How many minutes did she take to go to home ?

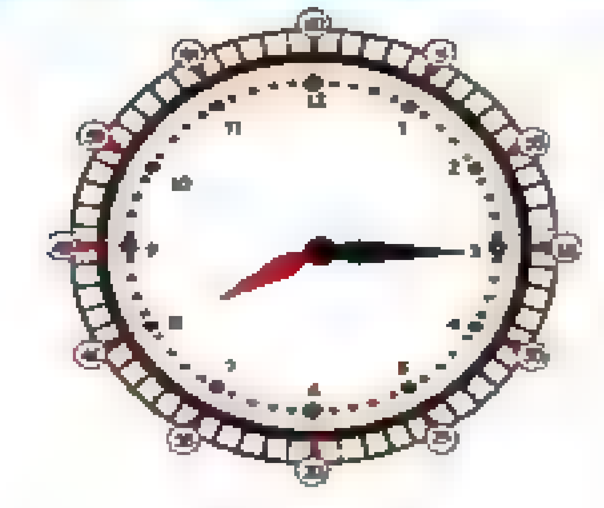


Solution The time = ... minutes .

Activity 3 If the distance from school to home is 45 minutes on foot, and you leave school 3:00 , What time will you get home? Draw the time on the watch.

Solution The time : ....

Activity 4 Join the analog watch with the digit clock:



8 :03

3 :40

8 :15

Self - check on lesson (26 , 27)

1 Write the time as an example :

EX

9 :05	...... :	...... :	...... : ......
...... :	...... :	...... :	...... : ......
...... :	...... :	...... :	...... : ......

2 Rajab went to the grocery store at [clock] Evening ,

then he went home at [clock]



The time it took = ... minutes

BAKKAR

Multiplication facts

3 Draw the short hand only for each of the following watches :

20 to three	10 past 4	Half past four	Nine o'clock
35 past three	Quarter past one	20 past ten	5 past five

4 Draw the long hand only for each of the following watches :

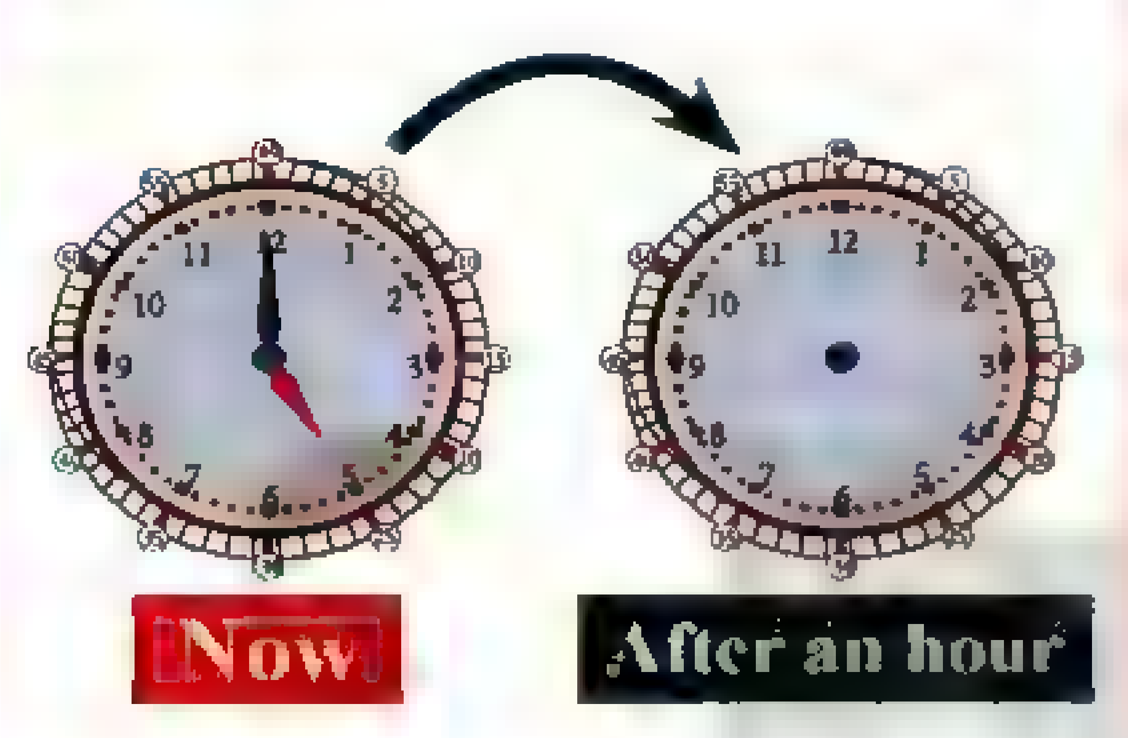
25 past three	10 past Four	Half past five	One o'clock
Quarter past eight	Three o'clock	5 past two	Quarter past seven



Chapter 3



5 Draw the hands according to the following cases :









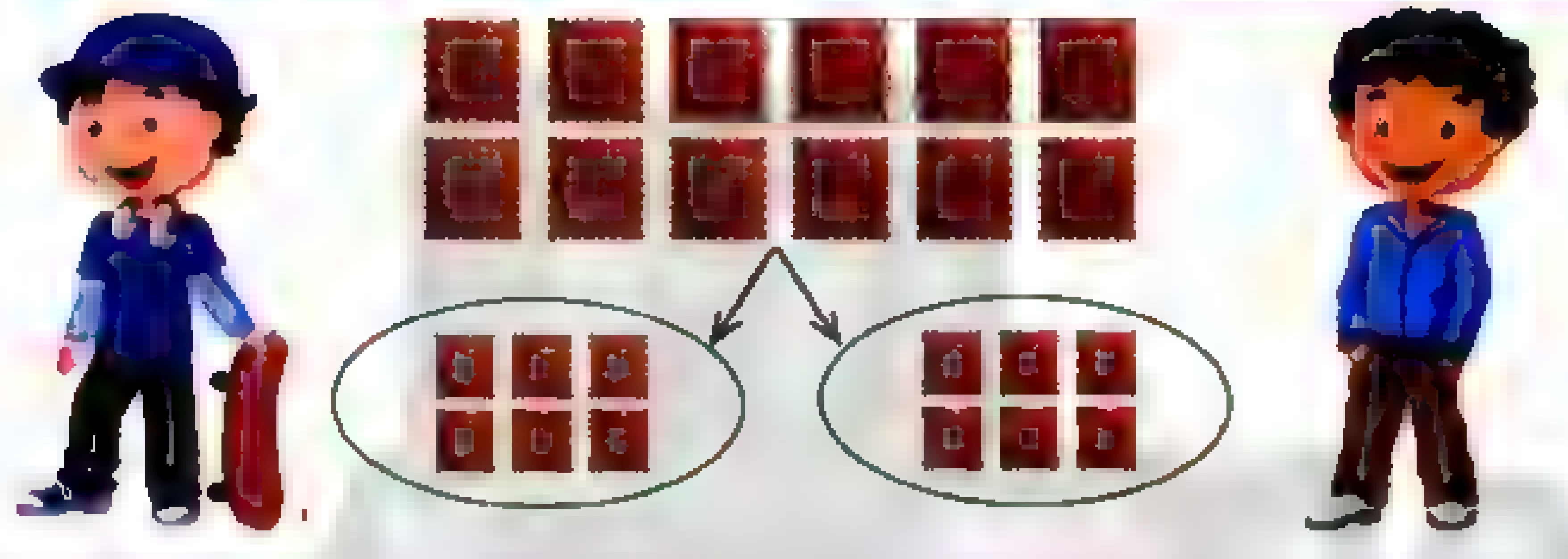






Lesson (28 , 29) Division

Activity 1 Yesterday I bought a box of 12 biscuits from the store and I want to share them with my friend equally. How many biscuits should each of us take ?

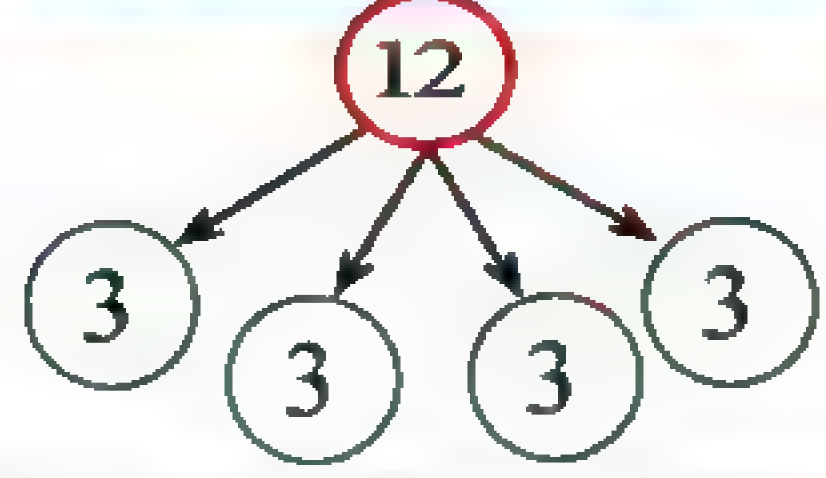


When 12 biscuits are divided equally, between two children we divide them into two groups with the same number of pieces this number can be written using the division sign (÷)

As follows : the share of each child = (12 ÷ 2) and reads

(12 divide by 2) = 6 pieces   because 2 × 6 = 12

Activity 2 When 12 biscuits are divided equally, between 4 children :



We divide it into 4 groups, each group contains .... pieces

This number can be written using the division sign (÷)

As follows: the share of each friend = (12 ÷ 4) and reads

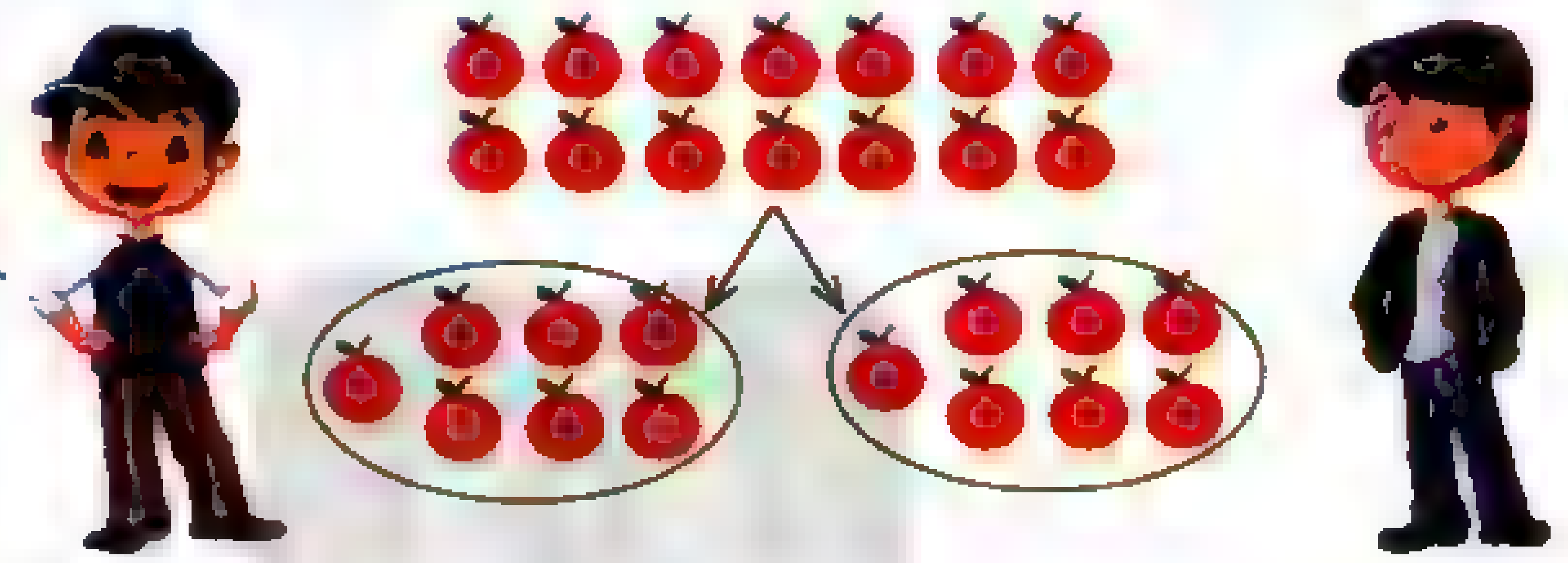
(12 divide by 4) = 3 pieces   because 4 × 3 = 12



Chapter 3

Exercise 1

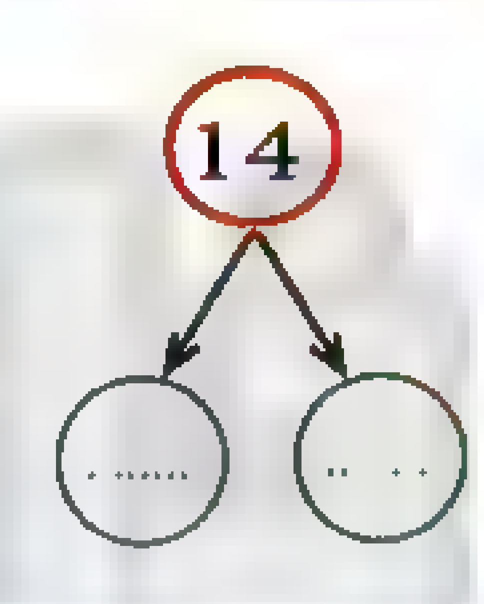
Two friends went to collect the fruits together, so they collected 14 fruits from a tree and then divide them equally between them. How many fruits did each of them take ?



We divide it into two groups, each group containing .... fruits

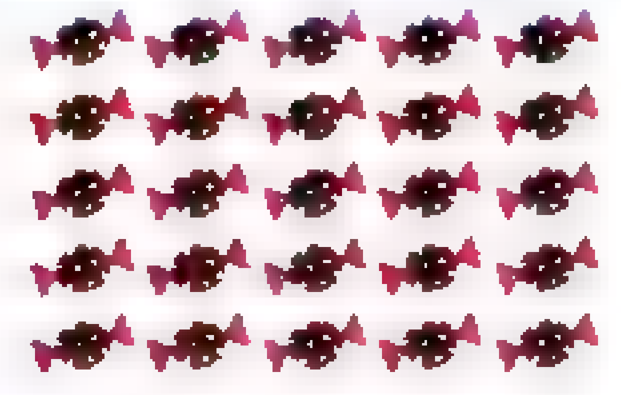
This number can be written using the division sign (÷) As follows: the share of each child = (14 ÷ ....) = 7 fruits

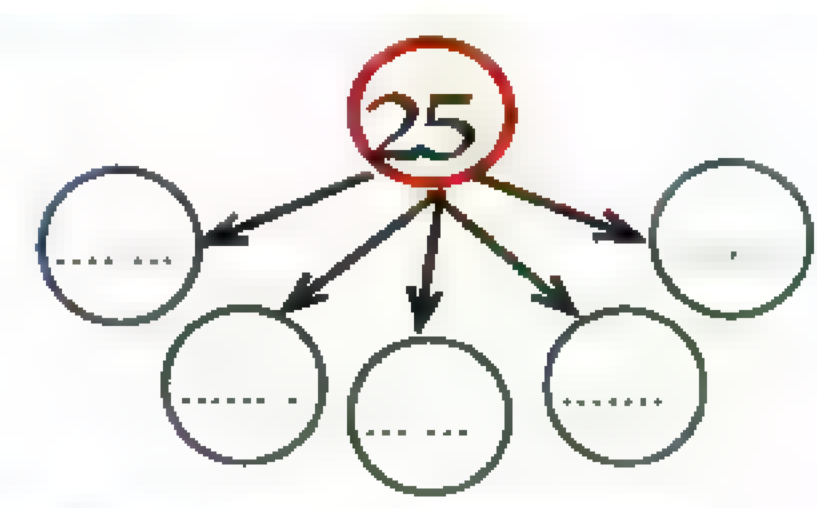
because 2 × .... = ...



Exercise 2

Nabil has 25 candies, which he wanted to share equally between 5 of his friends without keeping any of them for themselves, how many candy bars. Which each of Nabil's friends will take?





The solution

We divide it into 5 groups, each group contains ...... pieces

Share of each friend= (25 ÷ ....)

= .... pieces because .... × .... = 25

BAKKAR

Multiplication facts



Exercise 3

Aya baked 24 loaves of bread for 3 friends. How many loaves would a friend get if everyone got a fair share ?



24

....

Solution Share of each friend = (....... ÷ ....)

= .... loaves

because .... × .... = ...



Exercise 4

There are 16 fish required to be placed in 4 aquarium, and each should contain the same number of fish.
How many fish should be placed in every aquarium complete the drawing of pictures of fish in aquarium :

Solution Number of fish in each aquarium

= (....... ÷ ....)

= .... fish

because .... × .... = ...







Exercise 5

Sameh is preparing gift baskets. He has 20 oranges that need to be divides equally between 5 baskets. Draw a picture in the baskets below to solve the problem :

Solution Number of orange in each basket

= (....... ÷ ....)

= .... oranges

because .... × .... = ...







Chapter 3



Exercise 6

16 balloons. Tie each two balloons together to form a group. How many groups ?

Solution

Make .... groups each group has 2 balloons

Number of groups = (16 ÷ 2) = 8 groups

because 2 × .... = 16

Exercise 7

15 pounds. Divide evenly on 5 children.
How much money does a child take ?



Solution

Gave the money to 5 child each one take .... pounds

Share of child = (15 ÷ ....)

= .... pounds

because ....× .... = 15

Exercise 8

Find the result of the following :

(a) 63 ÷ 7 = ... (b) 35 ÷ 7 = ... (c) 48 ÷ 6 = ...

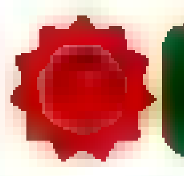
(d) 24 ÷ 3 = ... (e) 6 ÷ 6 = ... (f) 18 ÷ 2 = ...

(g) 32 ÷ 8 = ... (h) 21 ÷ 7 = ... (i) 15 ÷ 5 = ...

Self - check on lesson (28 , 29)

1 Put ($<$, $>$, $=$) :

a	$10 \div 2$	☐	9	b	$8 \div 8$	☐	1
c	$28 \div 7$	☐	3	d	$27 \div 3$	☐	10
e	$36 \div 4$	☐	9	f	$24 \div 6$	☐	7
g	$7 \div 1$	☐	0	h	$35 \div 5$	☐	5



Activities from Math Journal

2 The teacher has 36 crayons to share equally between 6 pupils. She must place the crayons in the cups blow. Draw a picture in the cups below to solve the problem :

Solution ....





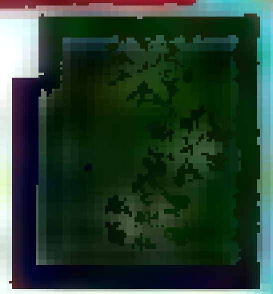
3 Each cat needs 2 fish for lunch. How many cats can we feed with 12 fish ?

Solution ....

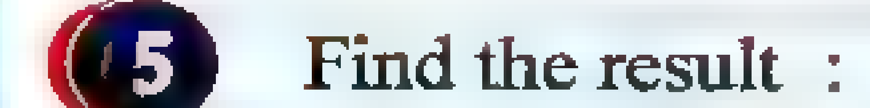


4 Each Ibis will eat 3 worms. You have 18 worms. How many Ibis can be fed ?

Solution ....



Chapter 3



5 Find the result :

a) (4 + 23) ÷ 9 = ...

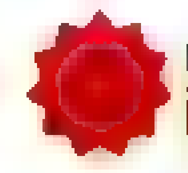
b) (35 - 5) ÷ 6 = ...

c) (20 + 1) ÷ 3 = ...

d) 45 ÷ (3 × 3) = ...

e) 6 ÷ (5 + 1) = ...

f) (20 – 10) ÷ 5 = ...



Activities from Math Journal

6 Each ox must eat 2 Grass Daily. There are 10 Grass.
How many ox can be fed ?



Solution ....

7 Each crocodile wants to eat 5 fish. There are 25.
How many crocodiles can be fed ?



Solution ....

8 Each fox must eat 6 insects. there are 24 insects.
How many fox can be fed ?



Solution ....

Lesson (30)

Relation between multiplication and division

Activity 1 Notice the following :

From the factors of 30: 10 and 3

Triangle: 30 (top), 10, 3

3 × 10 = 30
10 × 3 = 30
30 ÷ 3 = 10
30 ÷ 10 = 3

Is 30 has another factors ?

From the factors of 16: 8 and 2

Triangle: 16 (top), 8, 2

2 × ...... = 16
8 × ...... = 16
16 ÷ ...... = 2
16 ÷ ...... = 8

Exercise 1 Complete the following : (Math Journal)

Triangle: 35 (top), 5, ( )

...... × 5 = 35
...... × 7 = 35
35 ÷ ...... = 5
...... ÷ 5 = 7

Triangle: 18 (top), 3, ( )

...... × 6 = 18
...... × 3 = 18
18 ÷ ...... = 3
...... ÷ 3 = 6

Triangle: 24 (top), 6, ( )

6 × ...... = 24
6 × ...... = 24
24 ÷ 6 = ...
24 ÷ ...... = 6

Triangle: 36 (top), 9, ( )

...... × ...... = ...
...... × ...... = ...
...... ÷ ...... = ...
...... ÷ ...... = ...

Triangle: 21 (top), 7, ( )

...... × ...... = ...
...... × ...... = ...
...... ÷ ...... = ...
...... ÷ ...... = ...

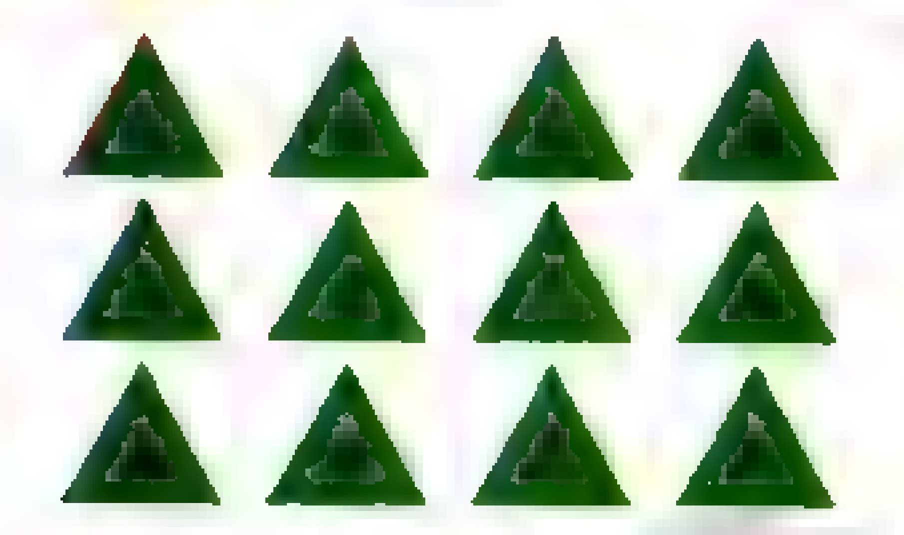
Triangle: 28 (top), 4, ( )

...... × ...... = ...
...... × ...... = ...
...... ÷ ...... = ...
...... ÷ ...... = ...



Chapter 3

Exercise 2 Complete the following :

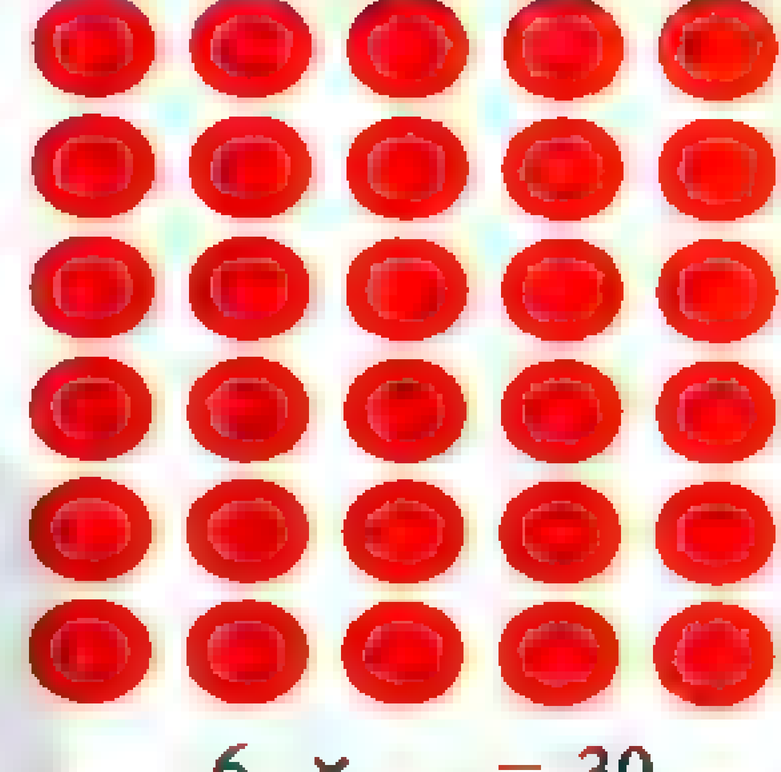


3 × 4 =

4 × 3 =

12 ÷ =

12 ÷ =

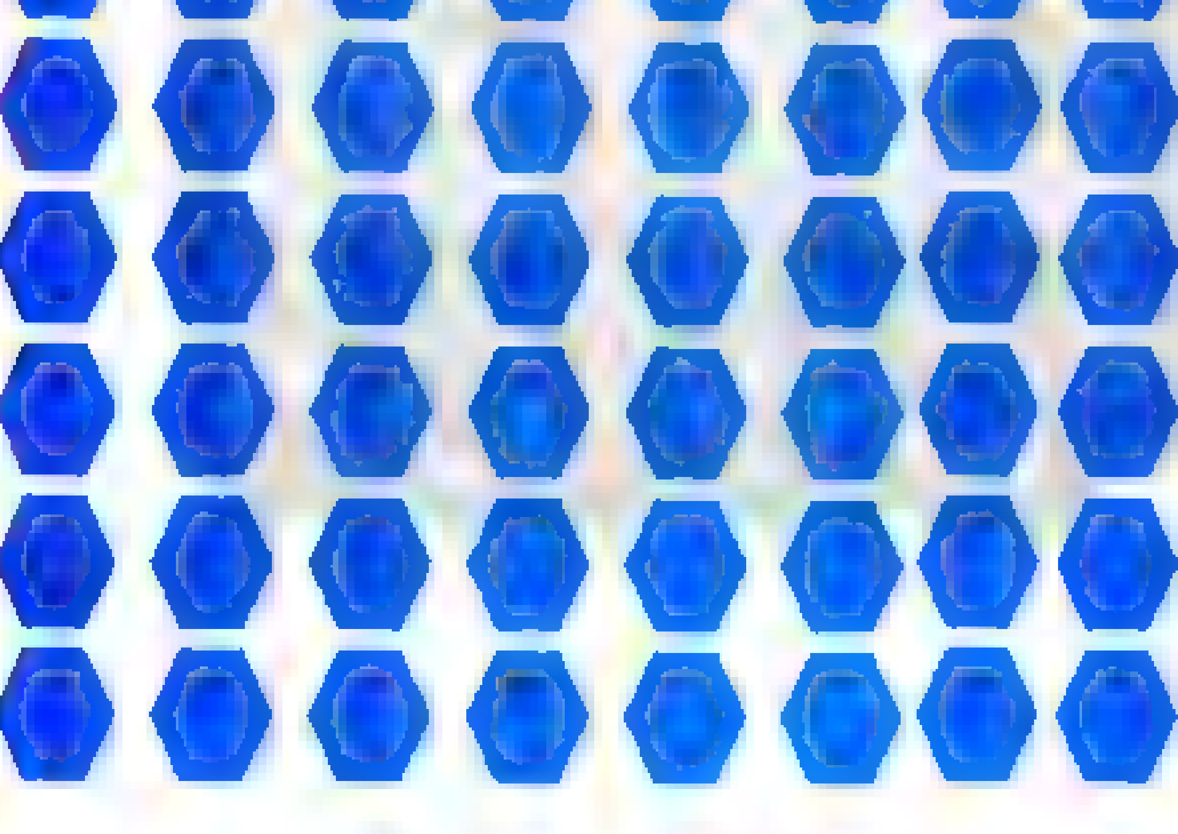


6 × = 30

5 × = 30

30 ÷ = 5

30 ÷ =

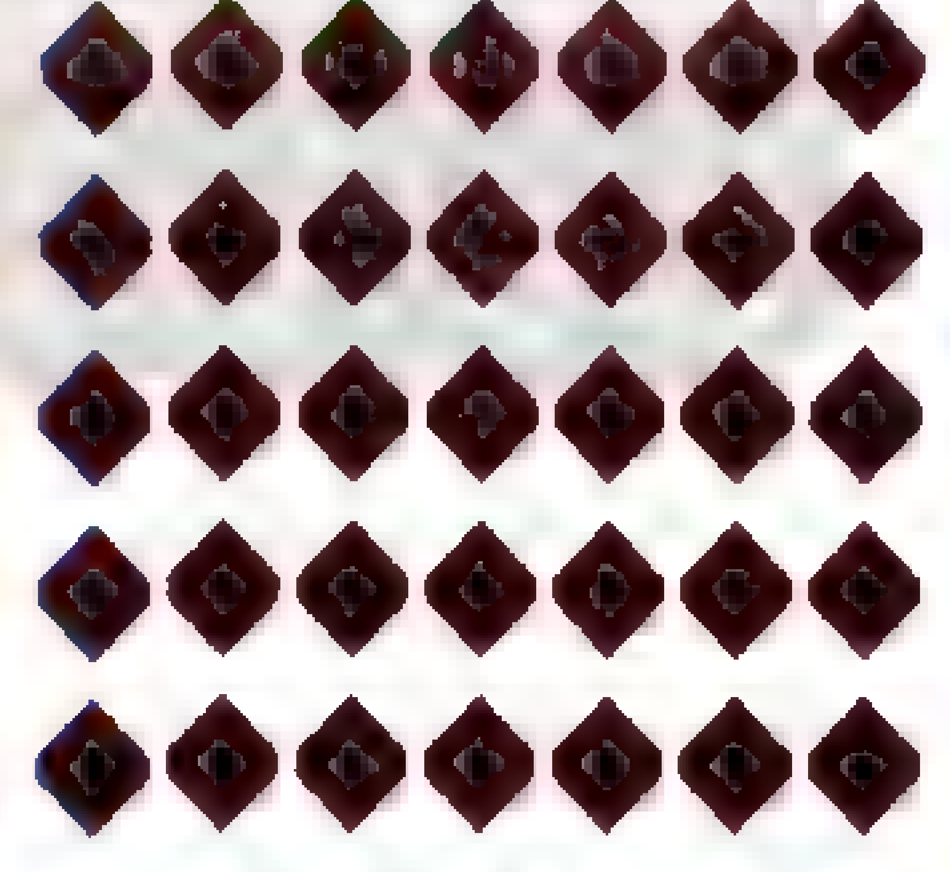


6 × =

× = 48

48 ÷ 6 =

48 ÷ = 6



5 × =

7 × =

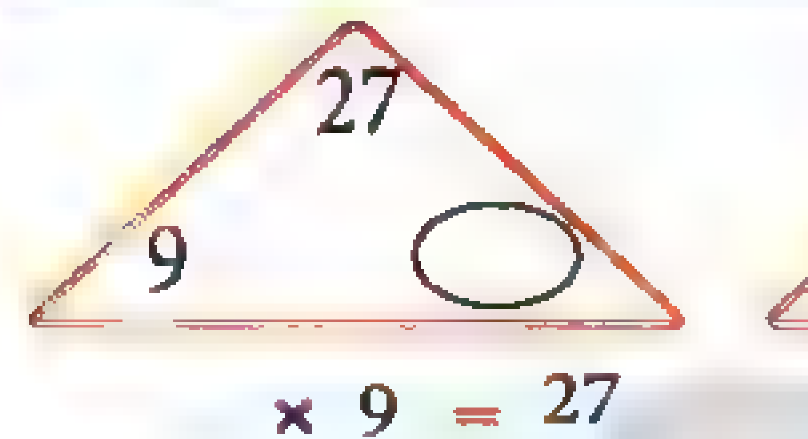
÷ =

÷ 5 =



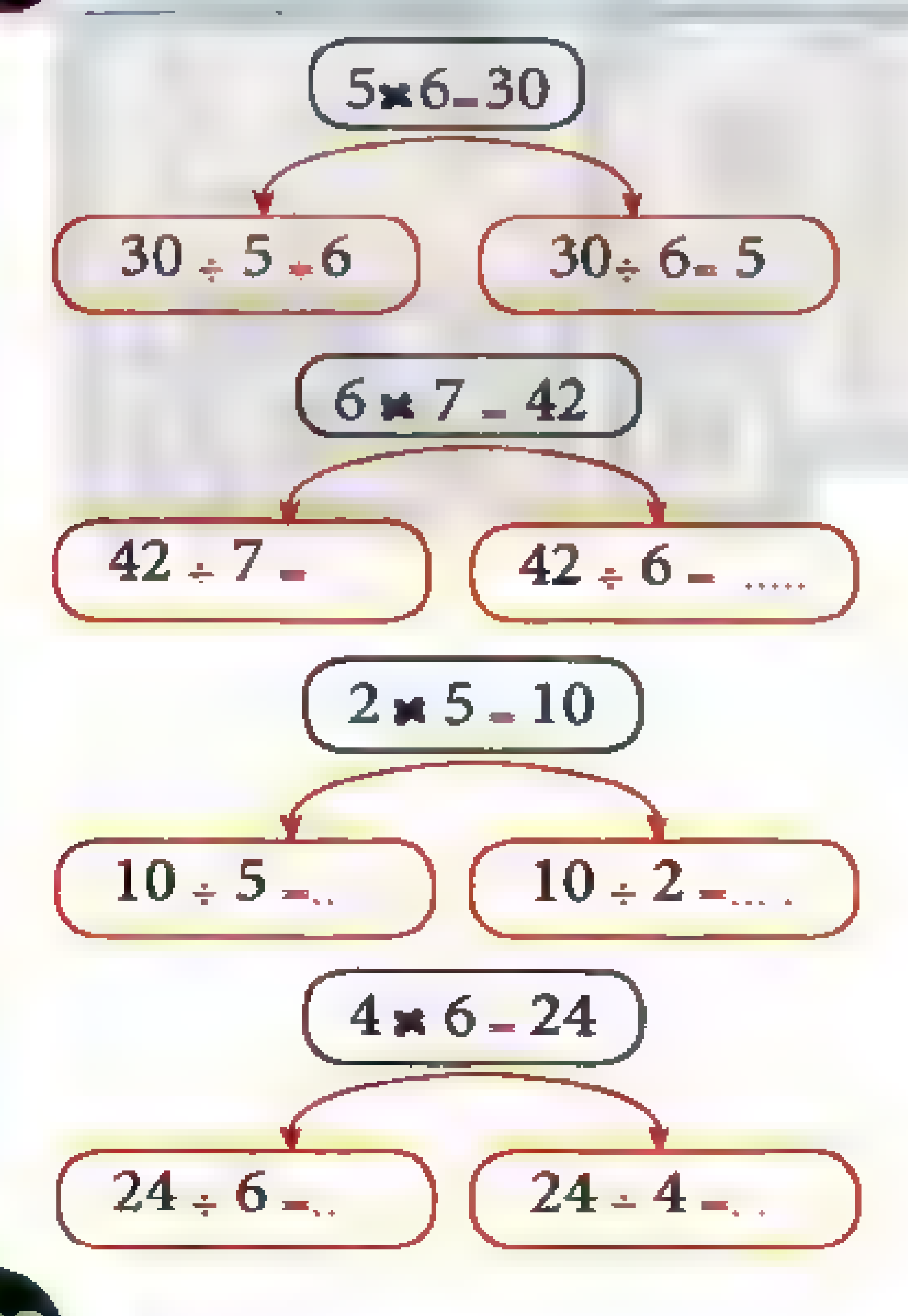
Self - check on lesson (30)

1 Complete the following :



27, 9, ( )	( ), 9, 4	35, 5, ( )
.... × 9 = 27	4 × 9 = ...	.... × .... = 35
× =	× .. = ...	.... × .... = ...
÷ =	.... ÷ .. =	35 ÷ ... = .
27 ÷ .... =	36 ÷ .. = .	35 ÷ ... = ...

2 Complete as the example :

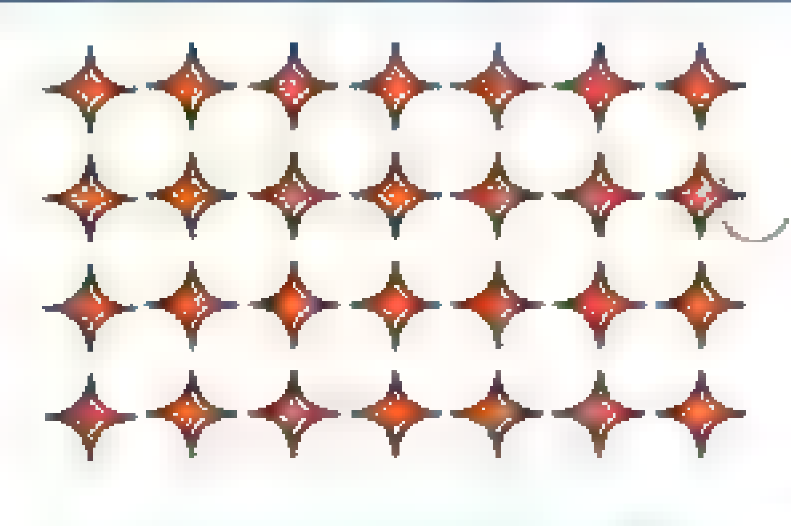


Multiplication	Division	Division
5 × 6 = 30	30 ÷ 5 = 6	30 ÷ 6 = 5
2 × 4 = 8	8 ÷ 4 = ...	8 ÷ 2 = ...
6 × 7 = 42	42 ÷ 7 =	42 ÷ 6 = ...
3 × 1 = 3	3 ÷ 1 = ...	3 ÷ 3 = ...
2 × 5 = 10	10 ÷ 5 = ..	10 ÷ 2 = ...
5 × 10 = 50	50 ÷ 10 = ...	50 ÷ 5 = ...
4 × 6 = 24	24 ÷ 6 = ..	24 ÷ 4 = ..
7 × 8 = 56	56 ÷ 8 = ...	56 ÷ 7 = ...



Chapter 3

3 Write the equation of multiplication and division :



.... × .... = ... × .... = ...

.... × .... = ... × .... = ...

.... ÷ .... = ... ÷ .... = ...

.... ÷ .... = ... ÷ .... = ...

4 Answer the following :

a) Find the number that if multiplied by (8) get (40), then deduce the division.

Solution .... × 8 = ...   then : 40 ÷ 8 = ...

b) Find the number that if multiplied by (7) get (28), then deduce the division.

Solution .... × 7 = 28   then : 28 ÷ 7 = ...

c) Find the number that if multiplied by (4) get (36), then deduce the division.

Solution .... × 4 = 36   then : 36 ÷ 4 = ...

d) Find the number that if multiplied by (6) get (30), then deduce the division.

Solution .... × 6 = 30   then : 30 ÷ 6 = ...

e) Find the number that if multiplied by (1) get (7), then deduce the division.

Solution .... × 1 = 7   then : 7 ÷ 1 = ...



Self - check 1 Chapters 2

1 Complete :

8	3	1	4	5
× 0	× 4	× 7	× 6	× 8
......	....	....	....	......

2 Hind packed 4 whole boxes with honey jars.
Each box has 6 jars, so what is the total number of jars?

Solution Number of jars = 4 × ..... = ... jars



3 Complete the following :

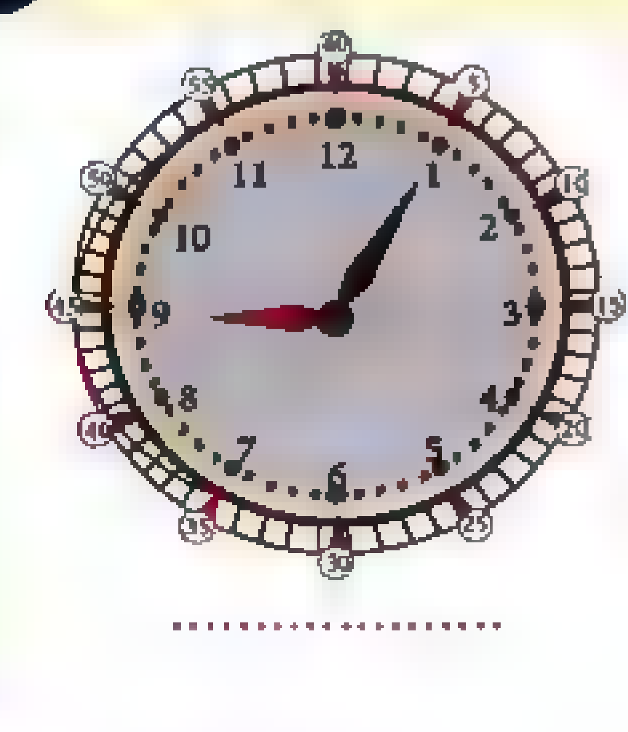
a) The factors of (6) are ...... , ..., ..., ...

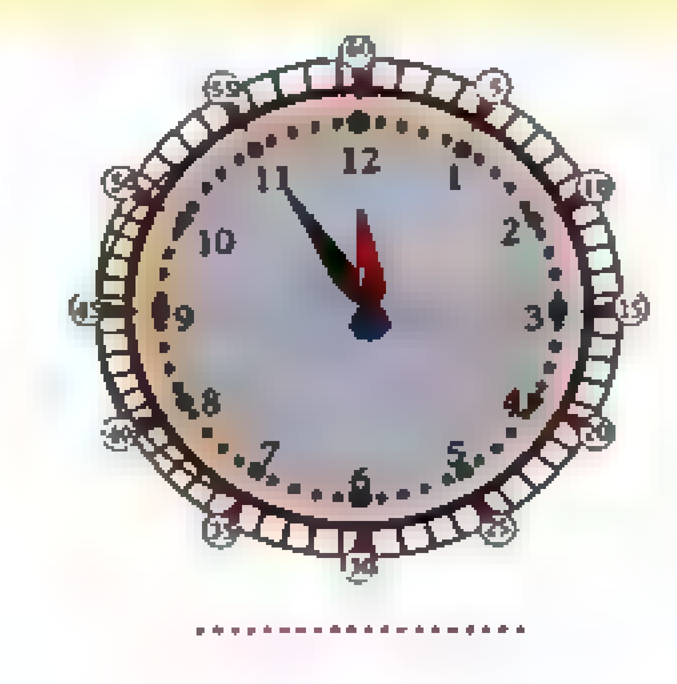
b) 63 ÷ 9 = ...

c) 5 × 7 = ...

d) Repeated addition ....
Multiplication ....

4 Write the time shown in each watch :







....

.... : .... : .... : ....

Self - check 2 Chapter 1, 2, 3

1 Complete :

$$\begin{array}{r} 8 \\ \times\ 5 \\ \hline \dots \end{array} \quad \begin{array}{r} 3 \\ \times\ 9 \\ \hline \dots \end{array} \quad \begin{array}{r} 8 \\ \times\ 10 \\ \hline \dots \end{array} \quad \begin{array}{r} 7 \\ \times\ 1 \\ \hline \dots \end{array} \quad \begin{array}{r} 5 \\ \times\ 3 \\ \hline \dots \end{array}$$

2 Choose the correct answer :

a) The value of 5 in 957 000 is . .... (50 000 , 5000 , 5)

b) 971 384 = 384 + ... + 70000 + 900 000 (1 , 100 , 1000)

c) The greatest number formed from (0, 5, 3, 1) is .... (135 , 1035 , 5310)

d) 34 Thousand = ... (3 400 , 34 000 , 34)

e) The place value of (8) in 328 910 is ..... (ones , hundreds, thousands)

3 If a family consumes 10 bottles of water per day . How many bottles do the family consume in 7 days?

Solution The number of bottles = ... × .... = ... bottles

4 Arrange the following in an ascending order :

a) 456 100 , 100 456 , 654 100 , 500 641 , 561 400

The order : ....

b) 5 m , 7 m , 200 cm , 800 cm

The order : ....

Chapter 4

The polygons (2 D shapes)

Key Vocabulary

Area	المساحة
Beyond knowledge	ما وراء المعرفة
Closed shape	شكل مغلق
Cube	مكعب
Dimensions	الأبعاد
Distribution property	خاصية التوزيع
Head	راس
Heads	رؤوس
Hexagon	سداسي الأضلاع
Octagon	ثماني اضلاع

Parallel	متواز
Parallelogram	متوازي اضلاع
Polygon	مضلع
Property	الخاصية
Quadrilateral	شكل رباعي
Review vocabulary when needed	مراجعة المفردات عند الحاجة
Rhombus	معين
Square unit	وحدة مربعة
Trapezium	شبه منحرف

Content



Bakkar Self-Check On each lesson

Exercise inspired by Math Jornal

Exercise inspired by Discover Book

Lesson (31 , 32 , 33)

The polygons (2 D shapes)

Activity 1 Find the missing factor by rolling the die :

	The missing factor	The product
1 × .... = ...	(5) for example	1 × 5 = 5
2 × .... = ...	....	....
3 × .... = ...	....	....
4 × .... = ...	....	....
5 × .... = ...	....	....
6 × .... = ...	....	....
7 × .... = ...	....	....
8 × .... = ...	....	....
9 × .... = ...	....	....
10 × .... = ...	....	....
11 × .... = ...	....	....
12 × .... =	....	....

Use one of the following strategies:

(Repeated Addition - skip count - array) **to find the product of multiplication**

Activity 2 Remember :


Triangle

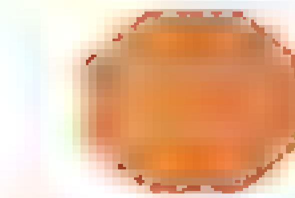

Square


Rectangle


Trapezium

Rhombus


Circle

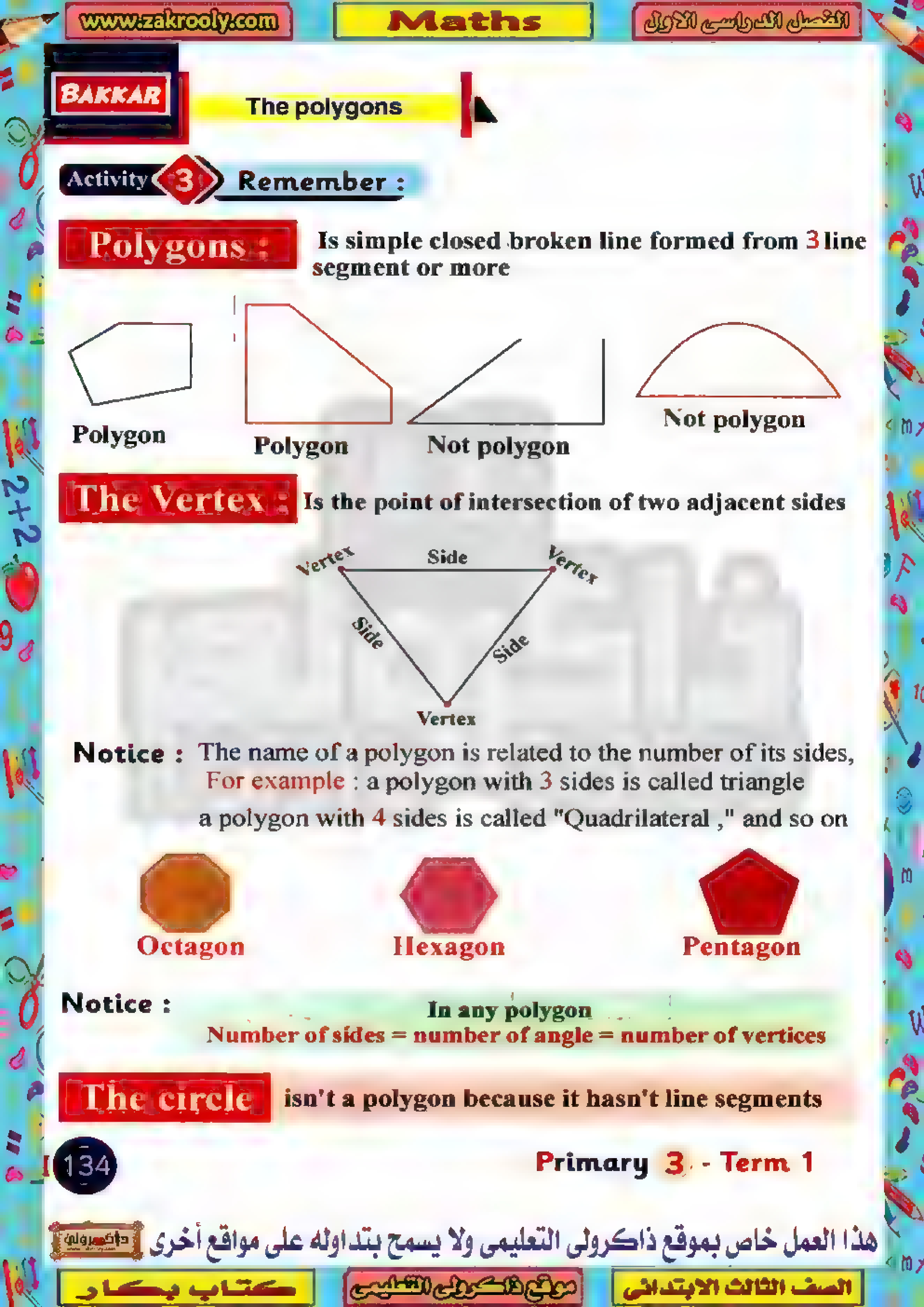

Hexagon


Octagon


Cuboid




Cylinder



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The polygons

Activity 3 Remember :

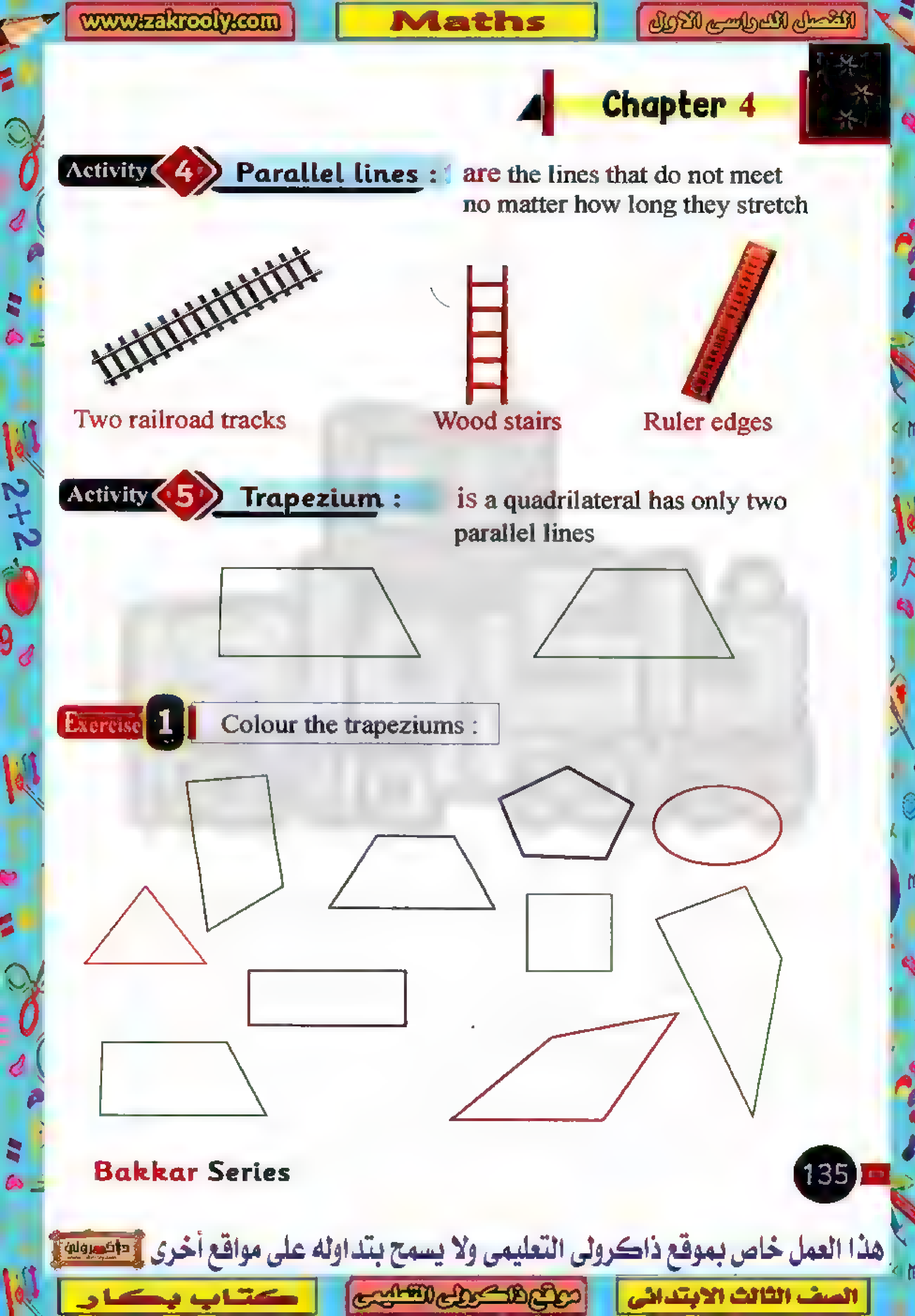
Polygons : Is simple closed broken line formed from 3 line segment or more

The Vertex : Is the point of intersection of two adjacent sides

Notice : The name of a polygon is related to the number of its sides,
For example : a polygon with 3 sides is called triangle
a polygon with 4 sides is called "Quadrilateral ," and so on

Notice :
In any polygon
Number of sides = number of angle = number of vertices

The circle isn't a polygon because it hasn't line segments



Chapter 4

Activity 4 Parallel lines :

are the lines that do not meet no matter how long they stretch

Two railroad tracks

Wood stairs

Ruler edges

Activity 5 Trapezium :

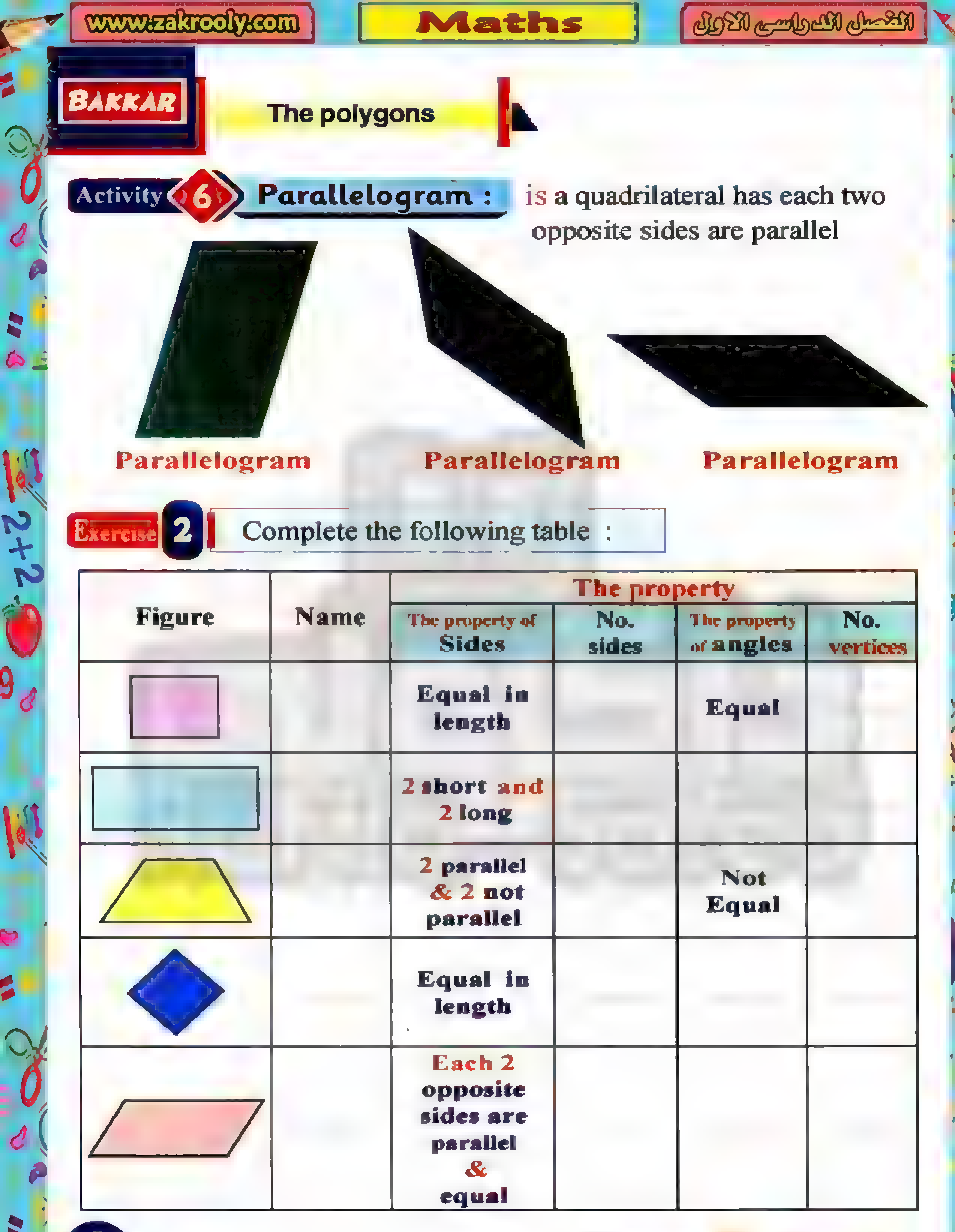
is a quadrilateral has only two parallel lines

Exercise 1 Colour the trapeziums :

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The polygons

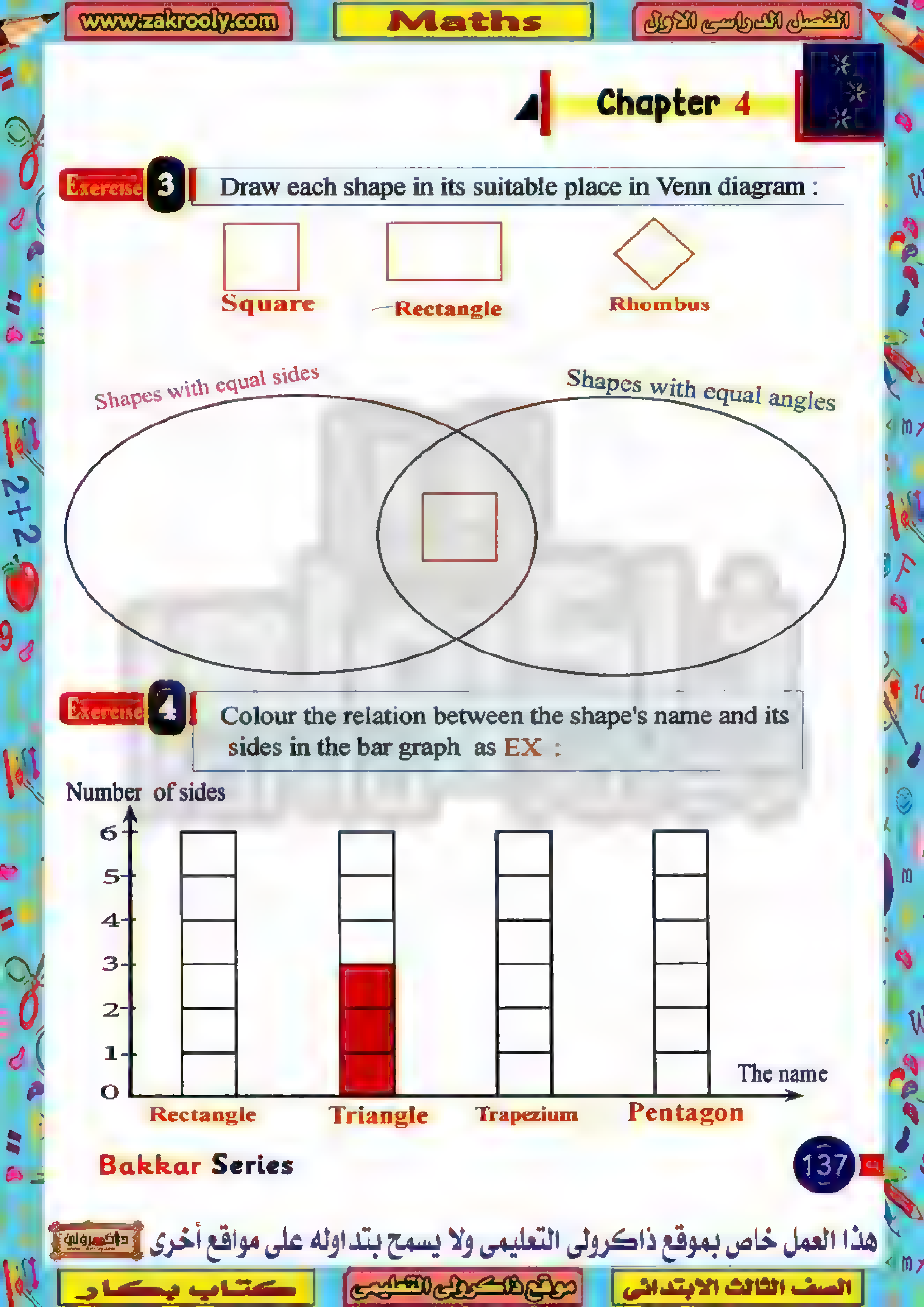
Activity 6 **Parallelogram :** is a quadrilateral has each two opposite sides are parallel



Parallelogram Parallelogram Parallelogram

Exercise 2 Complete the following table :

Figure	Name	The property			
		The property of Sides	No. sides	The property of angles	No. vertices
		Equal in length		Equal	
		2 short and 2 long			
		2 parallel & 2 not parallel		Not Equal	
		Equal in length			
		Each 2 opposite sides are parallel & equal			



Exercise 3 Draw each shape in its suitable place in Venn diagram :

Exercise 4 Colour the relation between the shape's name and its sides in the bar graph as EX :

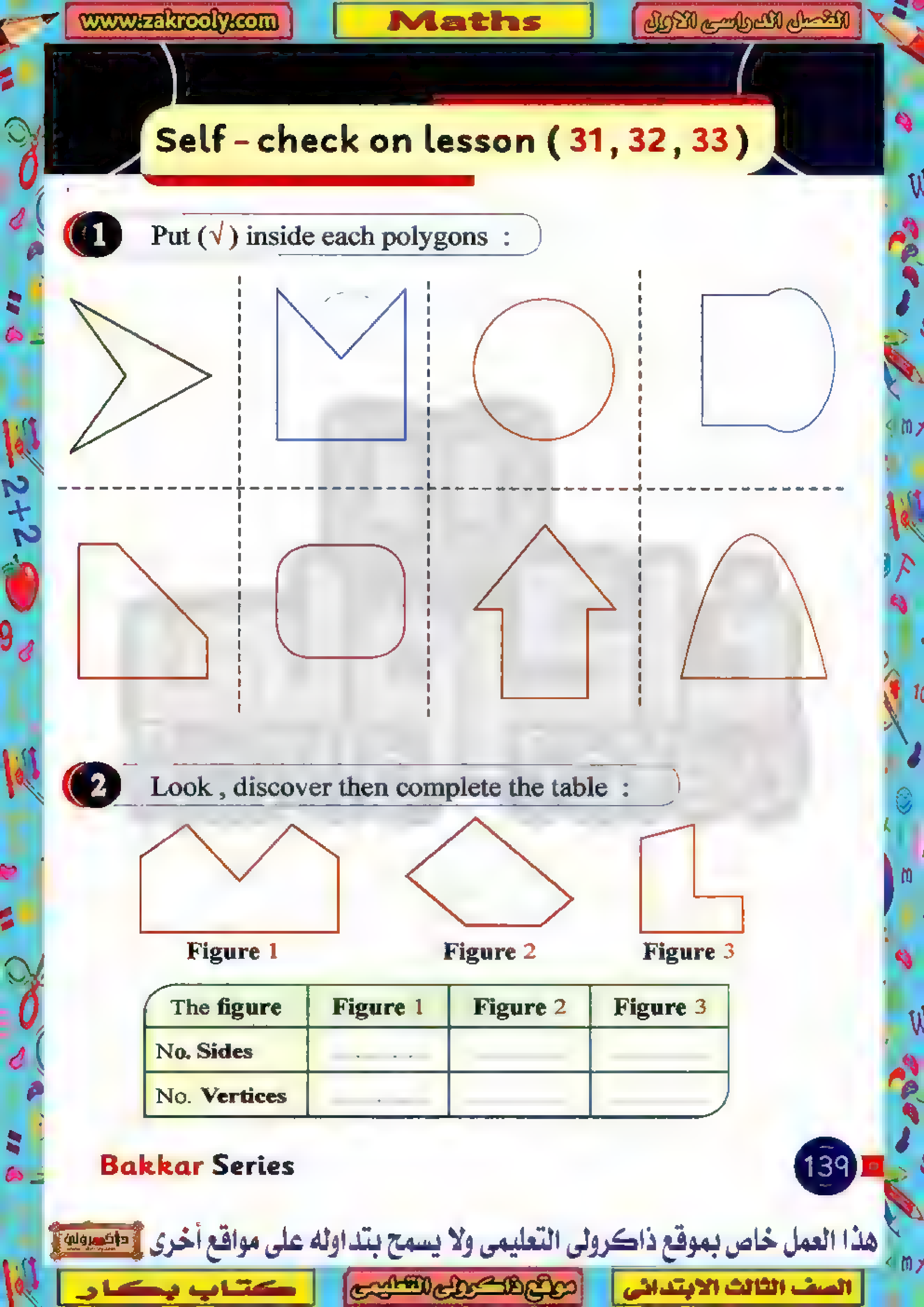
BAKKAR

The polygons

Exercise 5 Draw some polygons as Ex :

Math Journal

Category title : with 4 vertices Square Rectangle	Category title : 3 sides
Category title : More than 4 sides	Category title : Not polygons
Category title : curve	Category title : All sides are equal in length
Category title : each two opposite side are parallel	Category title :All sides are not equal in length
Category title : with 3 vertices	Category title : 4 angles with equal measure



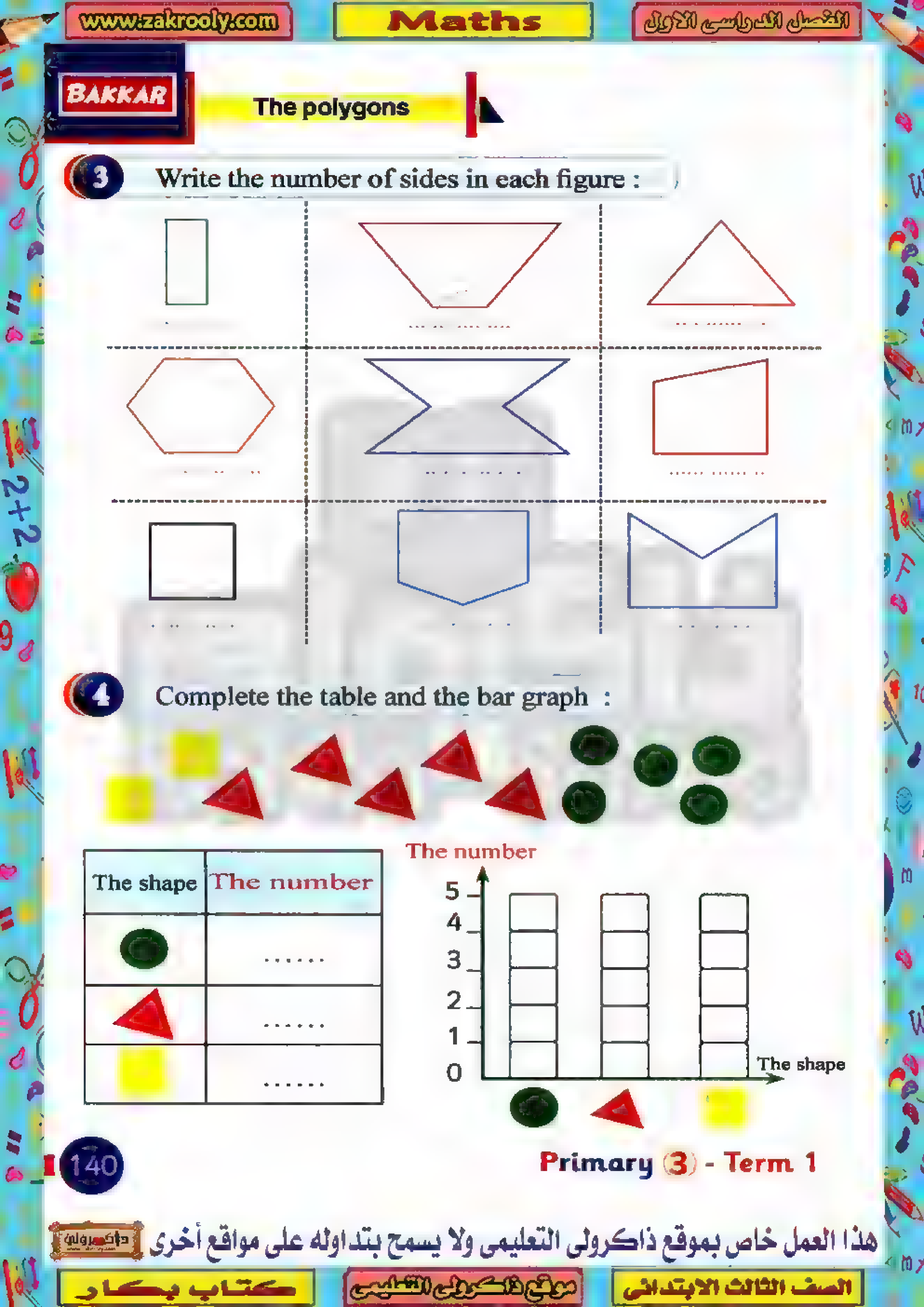
Self - check on lesson (31, 32, 33)

1 Put (√) inside each polygons :

2 Look , discover then complete the table :

Figure 1 Figure 2 Figure 3

The figure	Figure 1	Figure 2	Figure 3
No. Sides	....	....	....
No. Vertices	....	....	....



BAKKAR

The polygons

3 Write the number of sides in each figure :

....

....

....

4 Complete the table and the bar graph :

The shape	The number
(circle)	......
(triangle)	......
(square)	......

Lesson (34 , 35)

The area of rectangle

Activity 1 Find the missing factor by choose a number card :

1 2 3 4 5 6 7 8 9 10 11 12

The problem	The missing factor	The product
1 × .... = ...	(6) for example	1 × 6 = 6
2 × .... = ...	....	....
3 × .... = ...	....	....
4 × .... = ...	....	....
5 × .... = ...	....	....
6 × .... = ...	....	....
7 × .... = ...	....	....
8 × .... = ...	....	....
9 × .... = ...	....	....
10 × .... = ...	....	....
11 × .... = ...	....	....
12 × .... = ...	....	....

Use one of the following strategies:

(Repeated Addition - skip count - array) to find the product of multiplication

Activity 2 Notice the number of units :

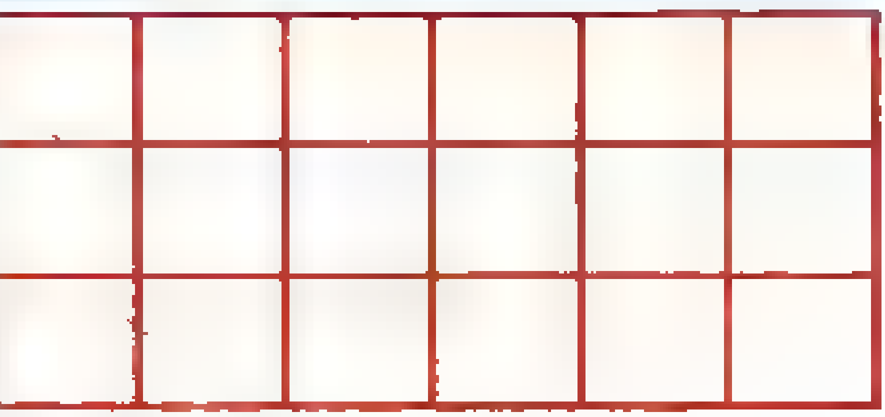
1 Unit   2 Units   3 Units



The polygons

Activity 3 Using the small squares to form array :

- Number of rows = 3
- Number of columns = 6



The number of these squares is called (area),

each small square is called (square unit).

So: the area of the rectangle = 3 x 6 = 18 square units.

The area : is the number of square units inside the polygon .

Activity 4 Answer the following :

Sarah wants to create a garden to plant (15) pumpkins, and each pumpkin needs an area of square unit . What should she do?

The solution :

A rectangular garden is established with 3 rows in each row 5 columns are as follows then you put a plant in each square unit

•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

- **Number of pumpkin plants = No. rows × No. columns**

  = 3 × 5 = 15 plants

Rule

Area of rectangle = No. Of rows × No. Of columns





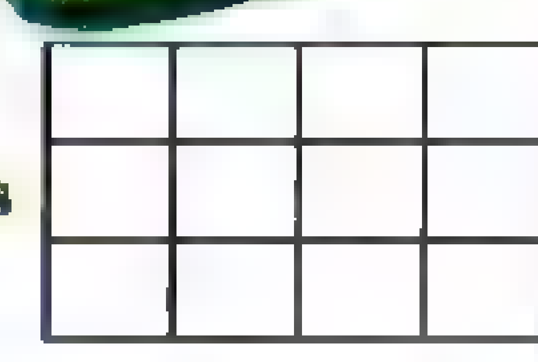

Chapter 4



Exercise 1 Answer the following :

Nadia wants to grow zucchini. Each zucchini needs one square unit . And you want to make the garden 3 rows , and in each row 4 square units. How many zucchini plants can be grown in a Nadia garden?
What is the area of her garden in square units?

The solution :



A rectangular garden shall be established with ...... rows in each row .... columns are as follows then put zucchini in each square unit.

- Number of zucchini plants = No. rows × No. columns

= ... × ... = . Plants

Exercise 2 Answer the following :

Omar wants to grow corn . A single corn plant requires an area of one square unit . He wants to make the garden 3 rows, and in each row 7 square units. How many corn plants can be grown in Omar garden?
What is the area of his garden in square units?



The solution :

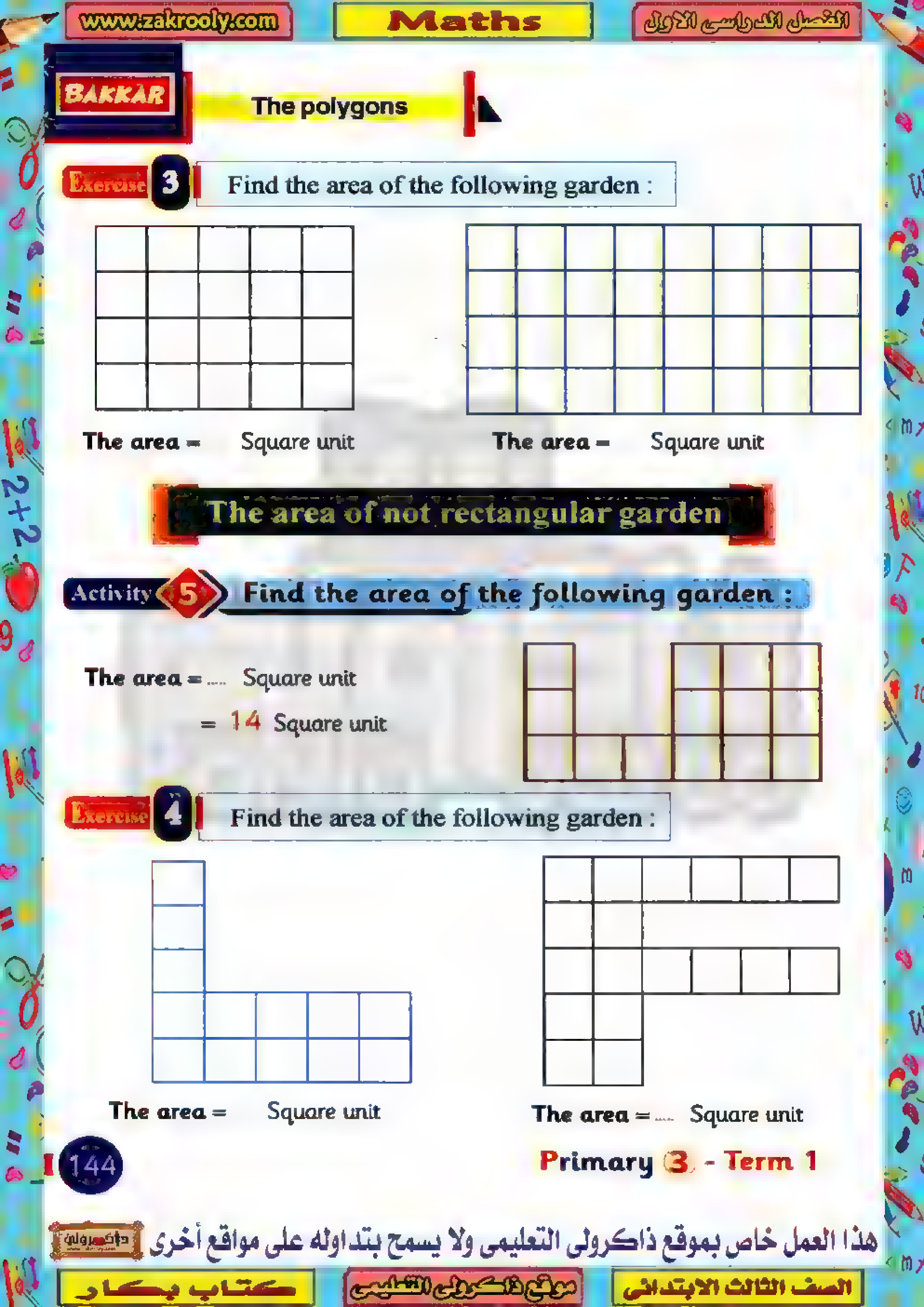


A rectangular garden shall be established with ...... rows in each row .... columns are as follows then put the corn seed in each square unit.

- **Number of corn plants = No. rows × No. columns**

= × . = plants



BAKKAR

The polygons

Exercise 3 Find the area of the following garden :

The area = Square unit

The area = Square unit

The area of not rectangular garden

Activity 5 Find the area of the following garden :

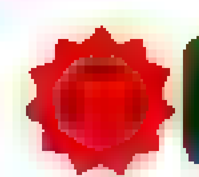
The area = ... Square unit

= 14 Square unit

Exercise 4 Find the area of the following garden :

The area = Square unit

The area = ... Square unit



Self - check on lesson (34 , 35)

Activities from Math Journal

1 Youssef loves watermelon and wants to plant it in his garden . watermelon needs 1 square unit of space . He would like the garden to have 4 rows with 4 square units in each row . How many watermelons can Youssef fit in his garden ? What is the area of his garden in square units ?

The solution :



A rectangular garden shall be established with

rows in each row ...... columns

then put the watermelon in each square unit .

Number of watermelon plants = No. × No.

= .... × =

2 Aya wants to plant lettuce needs 1 square unit of space . She would like the garden to have 5 rows with 8 square units in each row . How much lettuce can Aya fit in her garden ? What is the area of her garden in square units ?

The solution :



A rectangular garden shall be established with

rows in each row .. columns

then put the lettuce in each square unit.

Number of Lettuce plants = No. × No

= × =



BAKKAR

The polygons

3 Find the area of the following rectangles:

The area = ... Square unit

The area = .. Square unit

4 Find the area of the following garden :

Math Journal

The area = Square unit

The area = . Square unit

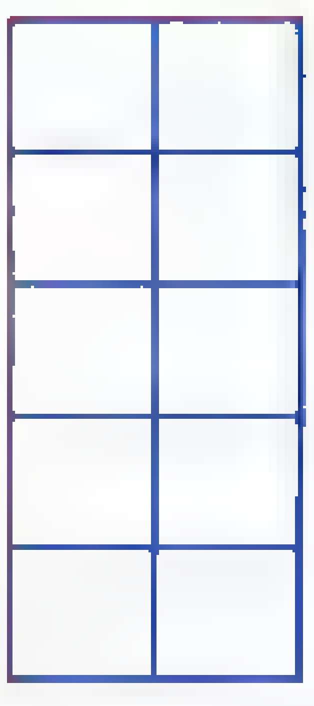


Lesson (36 , 37)

Definition of the area

Activity 1 Notice :





Number of units = 5×2

$= 10$ Square unit

Number of units = 2×5

$= 10$ Square unit

Notice : $2 \times 5 = 5 \times 2$

so we say : commutative is allow

Exercise 1 Complete :

a) If $3 \times 7 = 21$ then $7 \times 3 =$ ....

b) If $6 \times 2 = 12$ then $2 \times 6 =$ ....

c) If $3 \times 9 = 27$ then $9 \times 3 =$ ....

d) If $4 \times 10 = 40$ then $10 \times 4 =$ ....

e) If $1 \times 9 = 9$ then $9 \times 1 =$ ....

BAKKAR

The polygons

Activity 2 Diagonal of the square :

It is line segment connecting two non-consecutive vertices .
And divide it into two congruent triangles.

Diagonal

Math Journal

Challenge: How many triangles needed to make 5 squares?

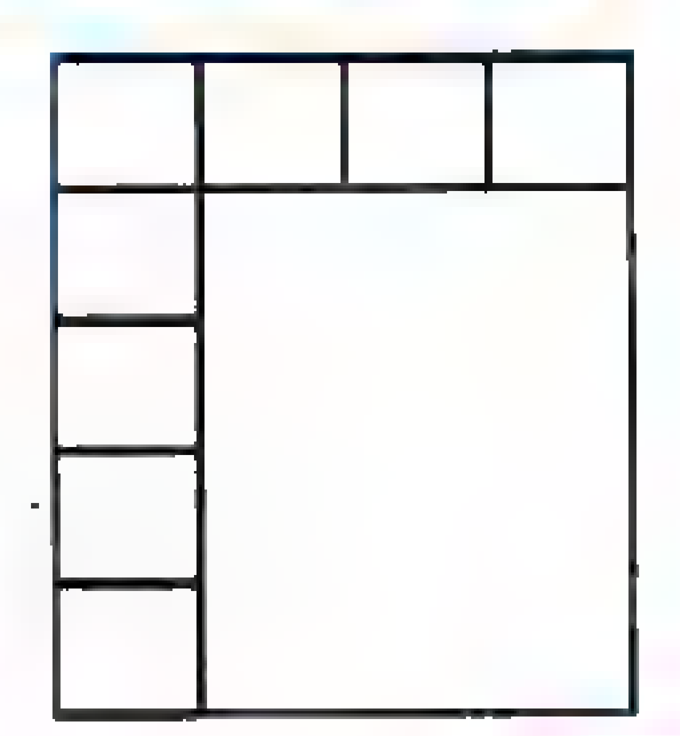
Exercise 2 Complete the following :

	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0										
1	0	1								9			
2	0	2	4										
3			6									33	
4													
5			10										
6											60		
7								49					
8													
9									72				
10													
11											110		
12						60							



Chapter 4

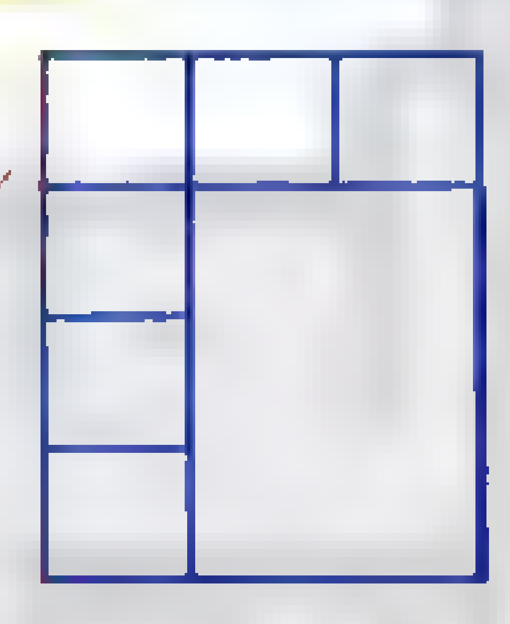
Activity 3 Determine the area of the rectangle :

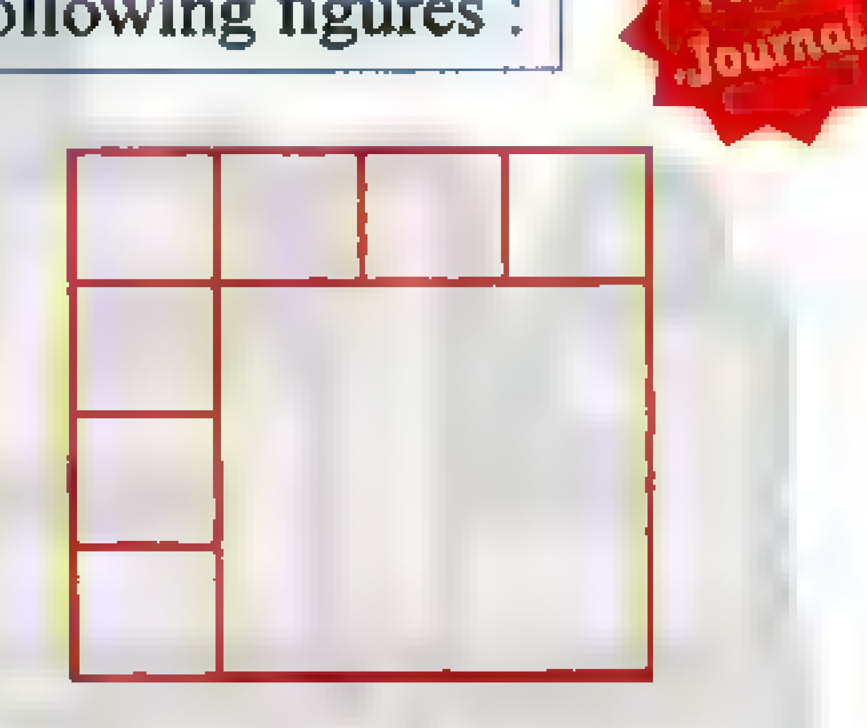


The area = No. Rows × No. Columns
= 5 × 4
= 20 Square unit

Exercise 3 Determine the area of the following figures :

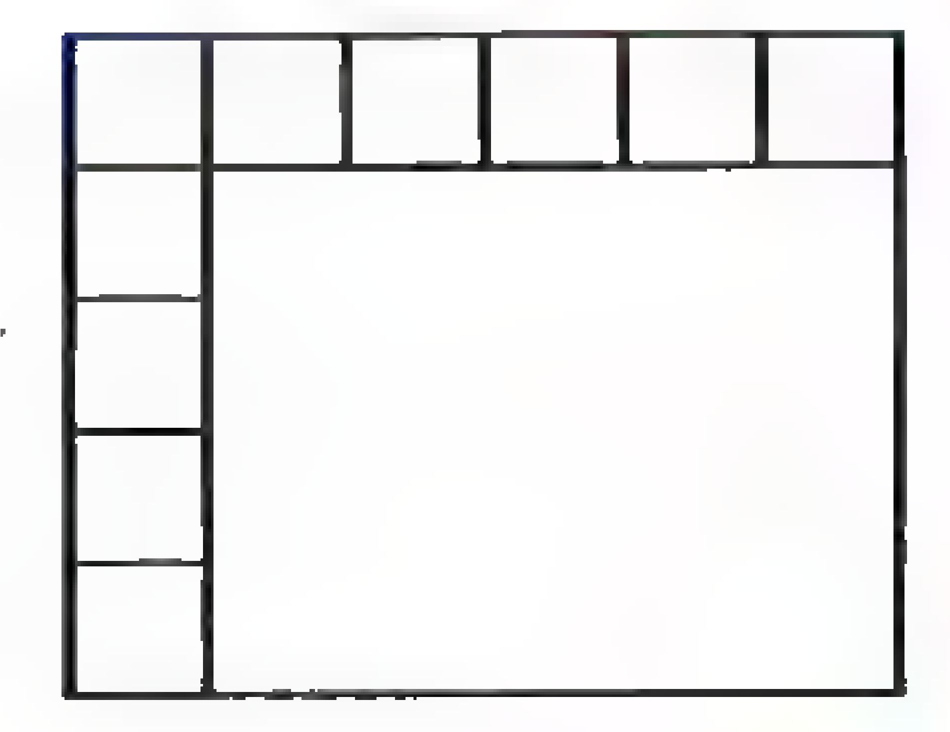
Math Journal



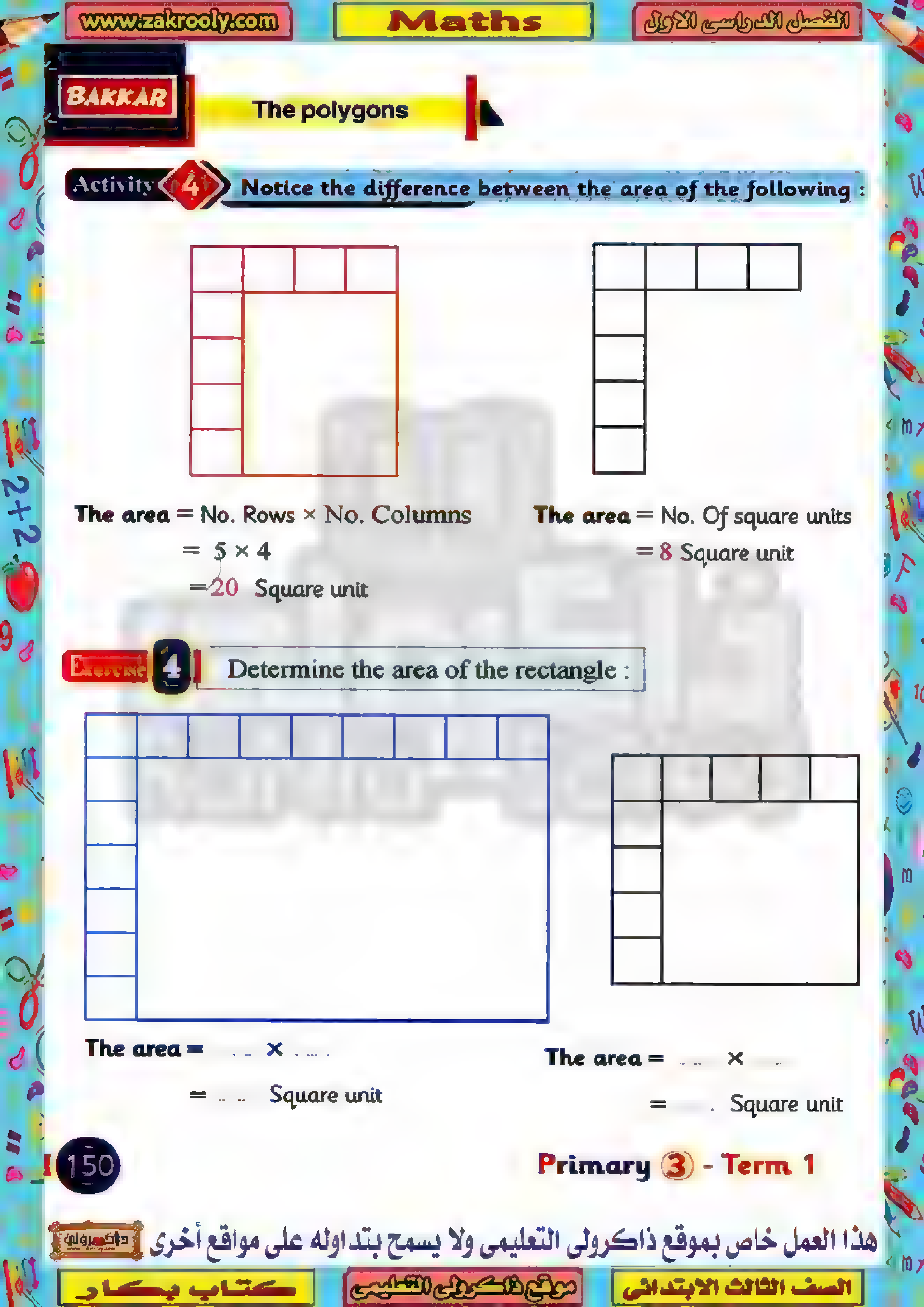


The area = 4 × 3
= ...... Square unit

The area = ... × ......
= ...... Square unit



The area = ... × ......
= ...... Square unit



BAKKAR

The polygons

Activity 4 Notice the difference between the area of the following :

The area = No. Rows × No. Columns
= 5 × 4
= 20 Square unit

The area = No. Of square units
= 8 Square unit

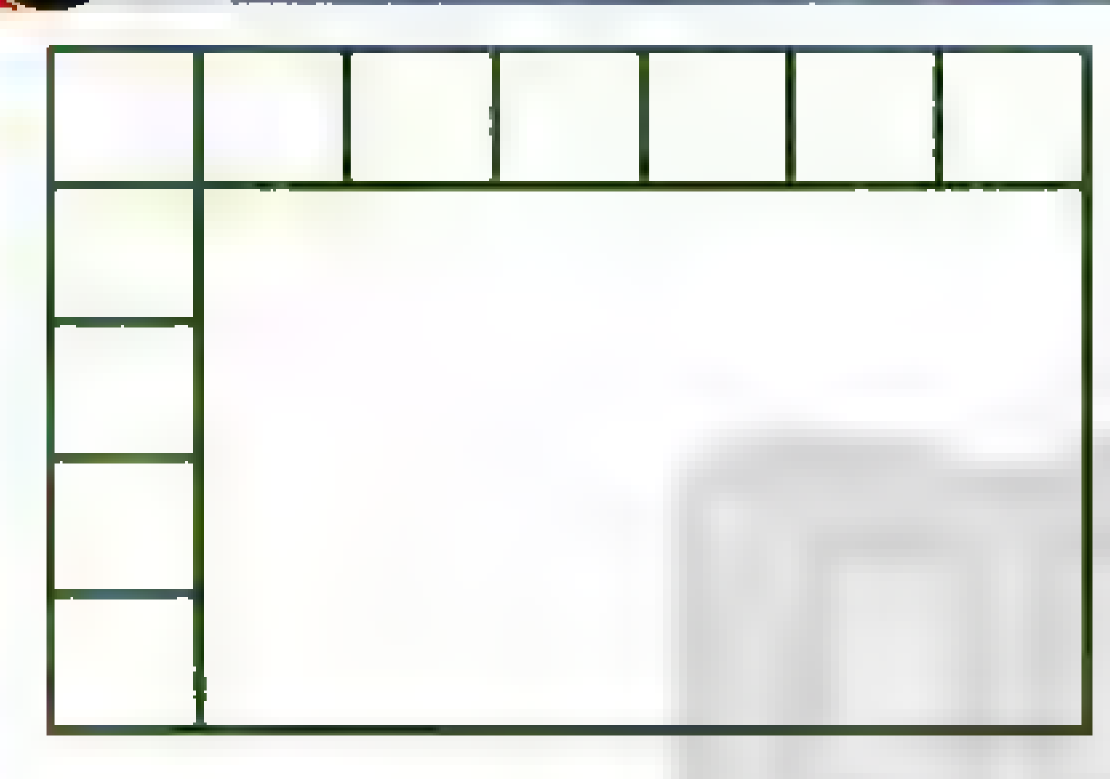
Exercise 4 Determine the area of the rectangle :

The area = ... × ....
= ... Square unit

The area = ... × ...
= ... Square unit

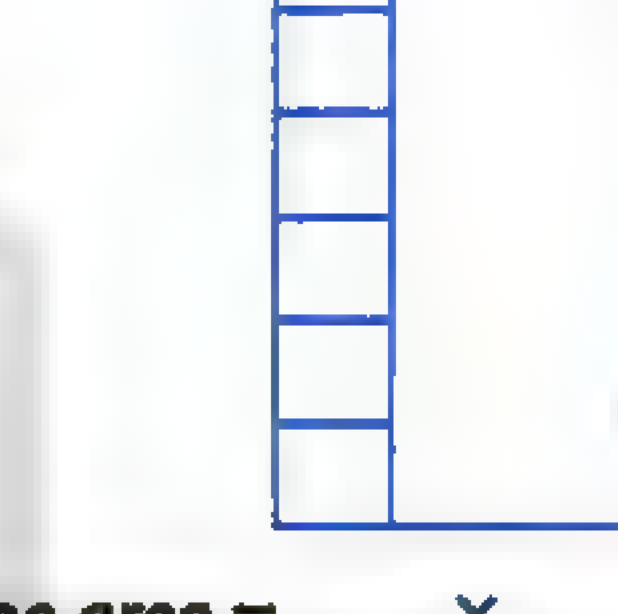
Self - check on lesson (36 , 37)

1 Determine the area of the rectangle :



The area = ... × ....

= .... Square unit



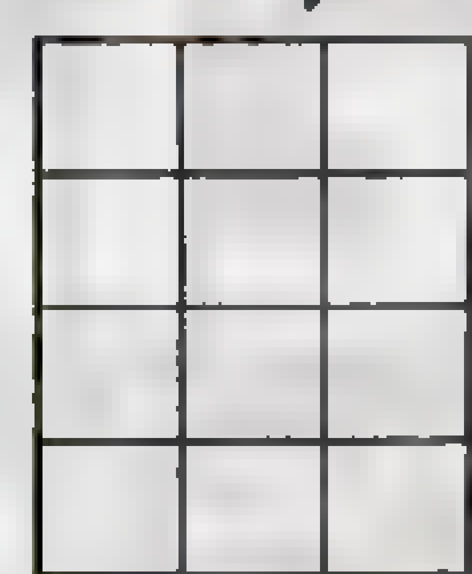
The area = ... × ......

= ...... Square unit



The area = ... × .....

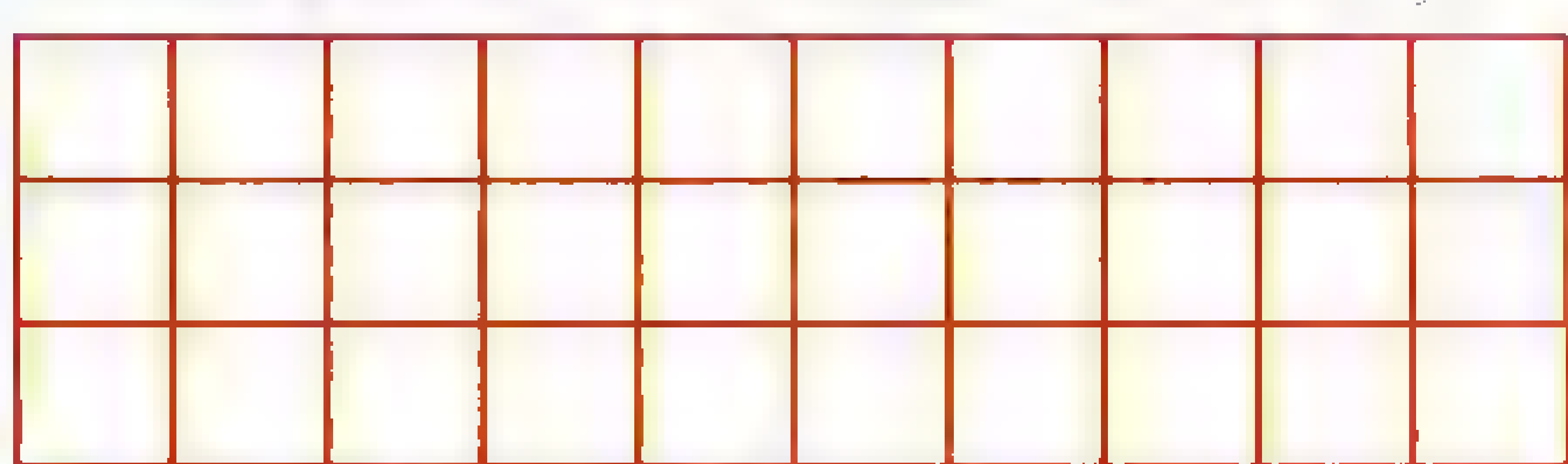
= .... Square unit



The area = .. × ......

= .... Square unit

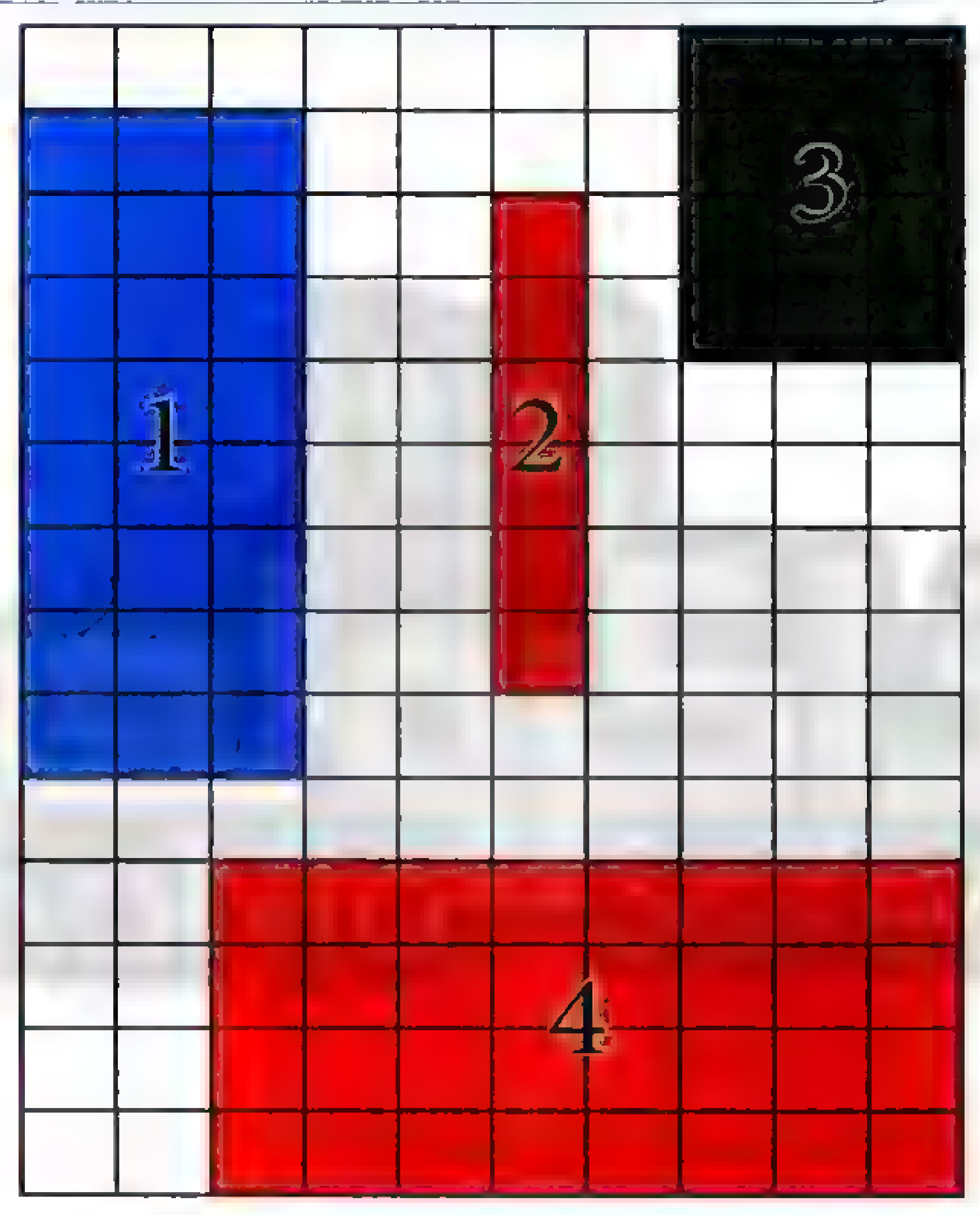
2 Shad to represent area of rectangle = 15 units :



BAKKAR

The polygons

3 Determine the area of the following figures :



The figure	1	2	3	4
The area				

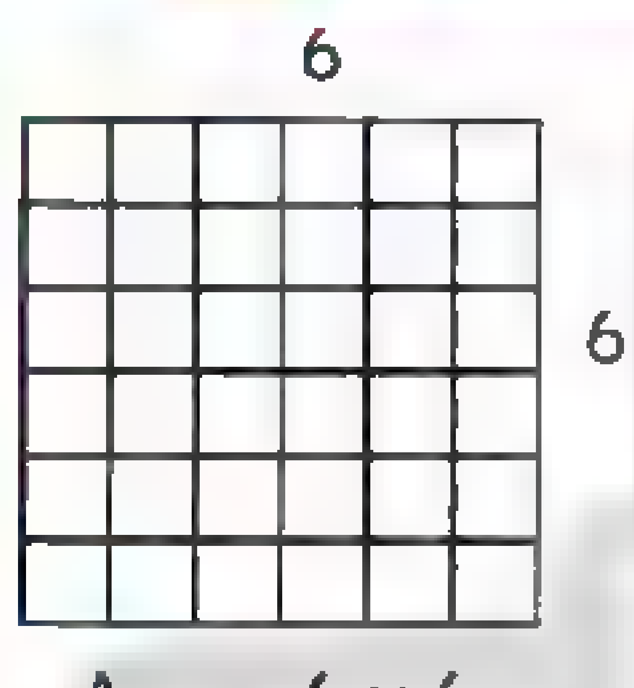


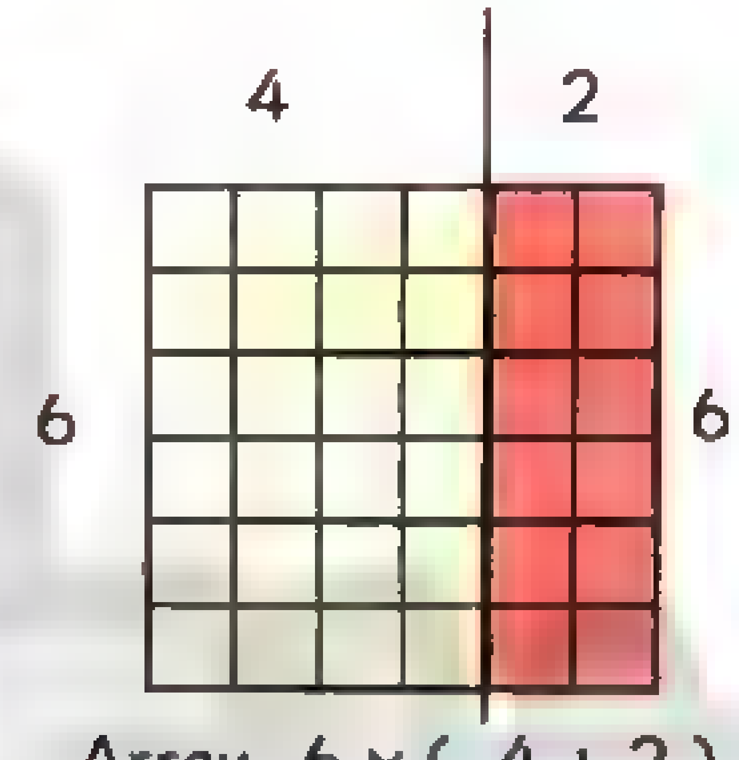
Lesson (38 , 39 , 40)

The distributive property to solve multiplication problems

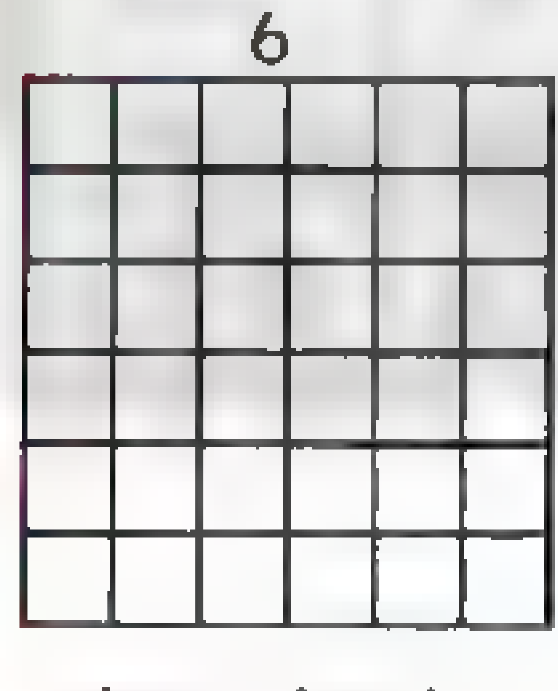
Distributive property in multiplication

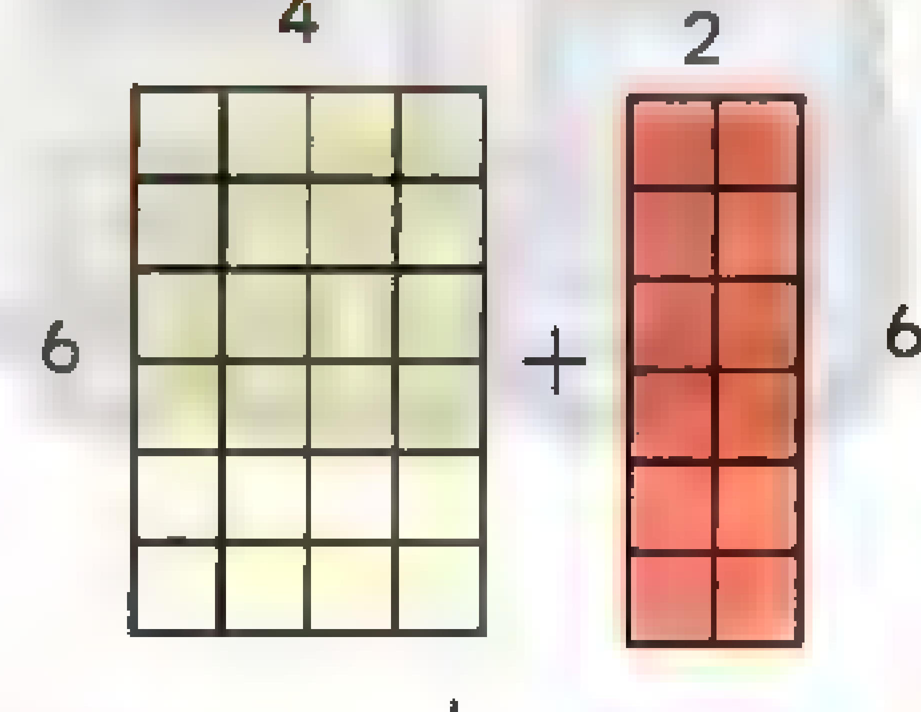
Activity 1 Notice :



Array 6 × 6 = 

Array 6 × (4 + 2)



Array 6 × 6 = 

Array 6 × 4 + Array 6 × 2

Deduction : $6 \times 6 = 6 \times (4 + 2) = (6 \times 4) + (6 \times 2)$

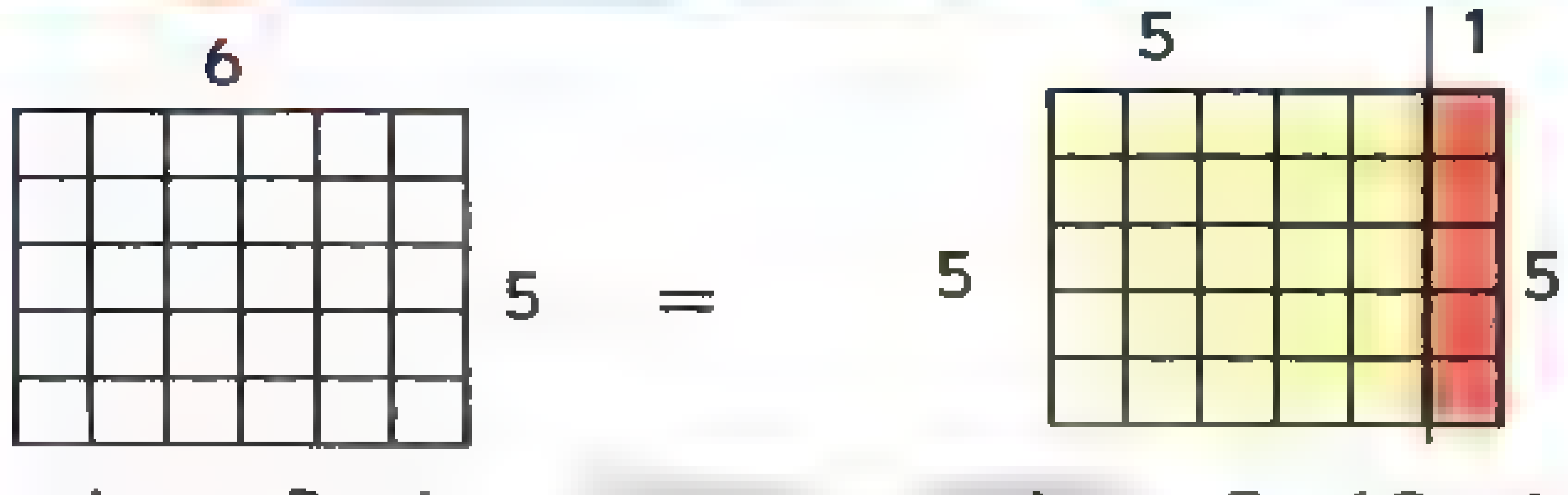
$= 24 + 12 = 36$

This property is called (multiplication distributive property)

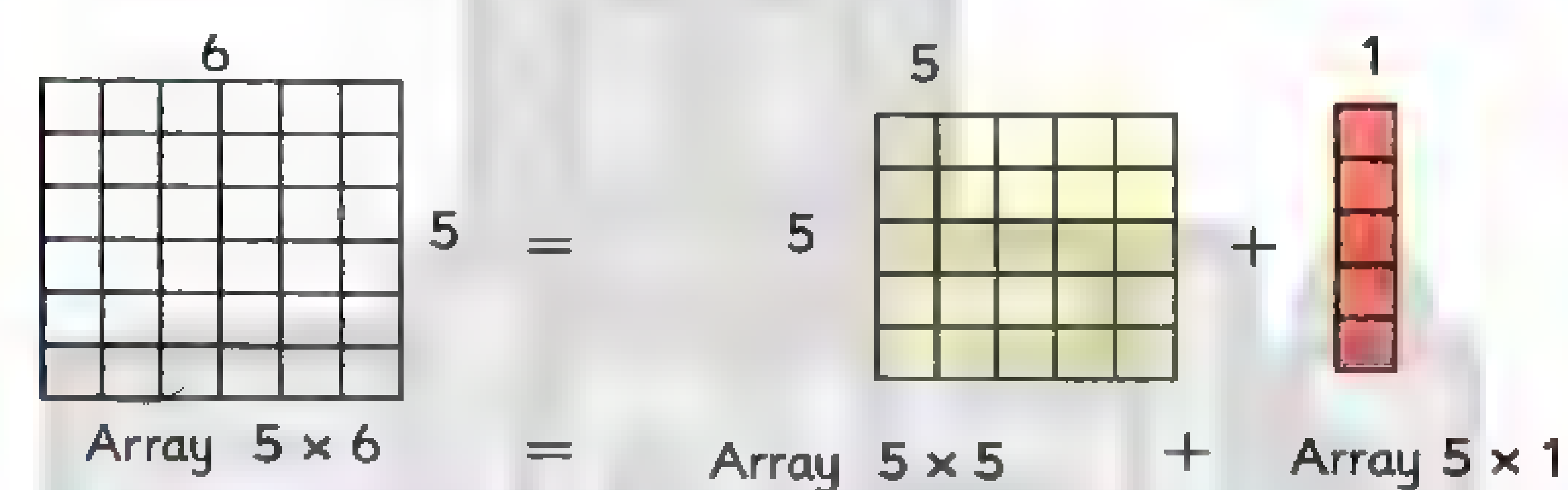


The polygons

Activity 2 Use the distributive property to find 5×6 :



Array 5×6 = Array $5 \times (5 + 1)$



Array 5×6 = Array 5×5 + Array 5×1

$5 \times 6 = 5 \times 5 + 5 \times 1$

$= 5 \times (5 + 1) = (5 \times 5) + (5 \times 1)$

Exercise 1 Use the distributive property to find :

* $6 \times 9 = 6 \times (5 + 4) = 6 \times 5 + 6 \times 4$

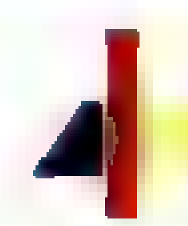
  = ... + ... = ...

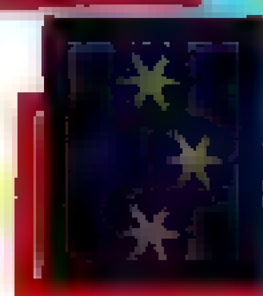
* $4 \times 8 = 4 \times (5 + 3) =$ ...... × ...... + ... × ......

  = ... + 12 = ...

* $3 \times 7 = 3 \times (3 + 4) =$ ...... × ...... + ... × ......

  = 9 + ... = ...

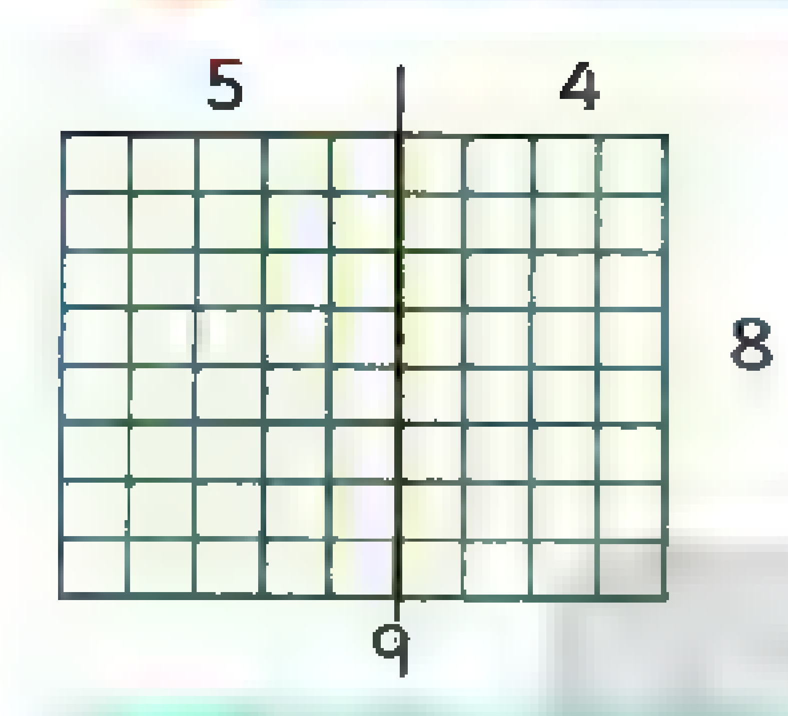




Chapter 4

Activity 3 Use the distributive property to find :

Math Journal



$8 \times 5 = 40$

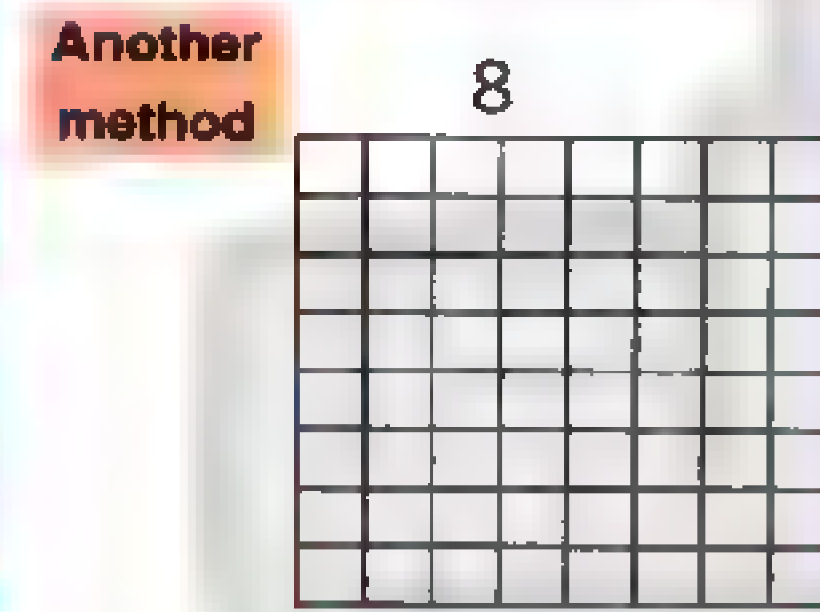
$8 \times 4 = 32$

$40 + 32 = 72$

$8 \times 9 = 72$

$$8 \times 9 = 8 \times (5 + 4) = (8 \times 5) + (8 \times 4)$$

Another method



$8 \times 8 = 64$

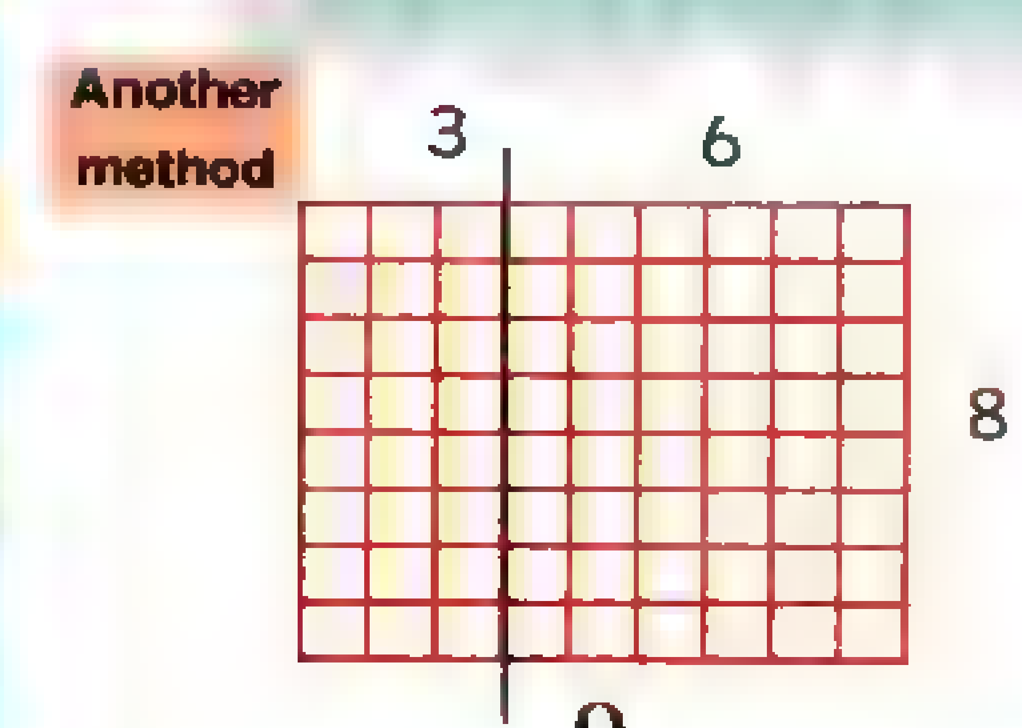
$8 \times 1 = 8$

$64 + 8 = 72$

$8 \times 9 = 72$

$$8 \times 9 = 8 \times (8 + 1) = (8 \times 8) + (8 \times 1)$$

Another method



$8 \times 3 = 24$

$8 \times 6 = 48$

$24 + 48 = 72$

$8 \times 9 = 72$

$$8 \times 9 = 8 \times (3 + 6) = (8 \times 3) + (8 \times 6)$$

BAKKAR

The polygons

Exercise 2 Use the distributive property to find :

Math Journal

...... × ...... = ...

...... × ...... = ...

...... + ... = ...

7 × 8 = ...

7 × 8 = 7 × (...... + ...) = (7 × ......) + (7 × ......)

...... × ...... = ...

...... × ...... = ...

...... + ... = ...

9 × 6 = ...

9 × 6 = 9 × (...... + ...) = (...... × ......) + (9 × ......)

...... × ...... = ...

...... × ...... = ...

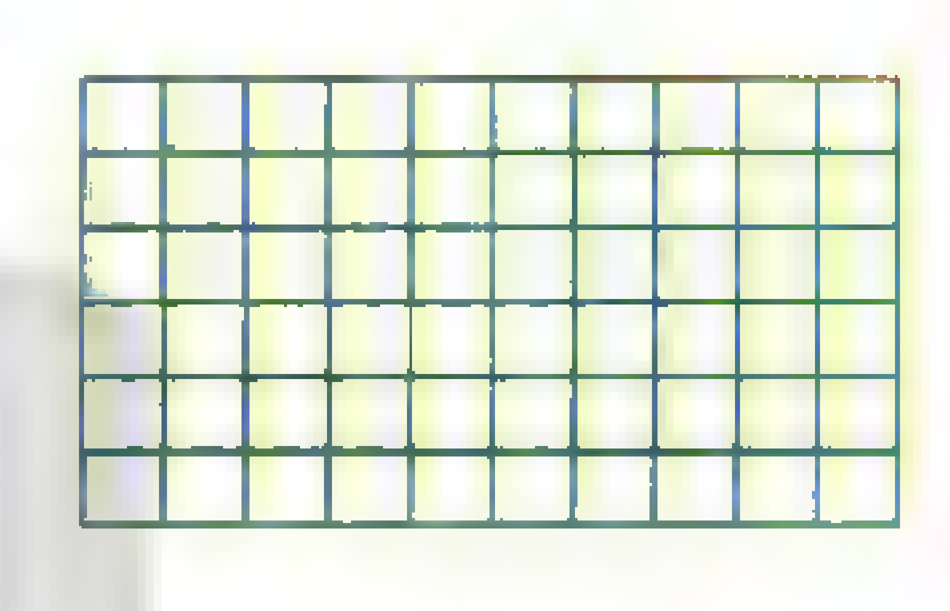
...... + ... = ...

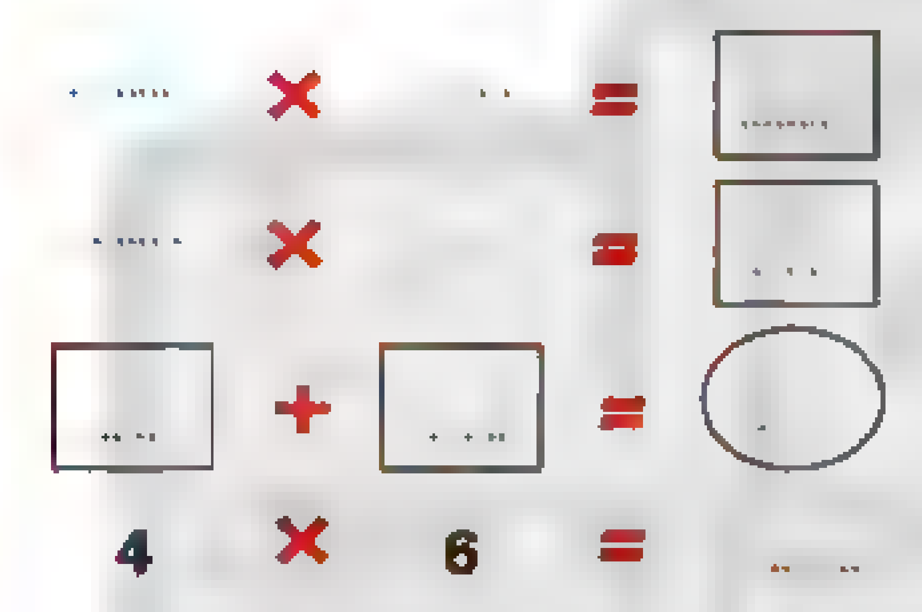
8 × 2 = ...

8 × 2 = ... × (...... + ...) = (...... × ......) + (...... × ......)

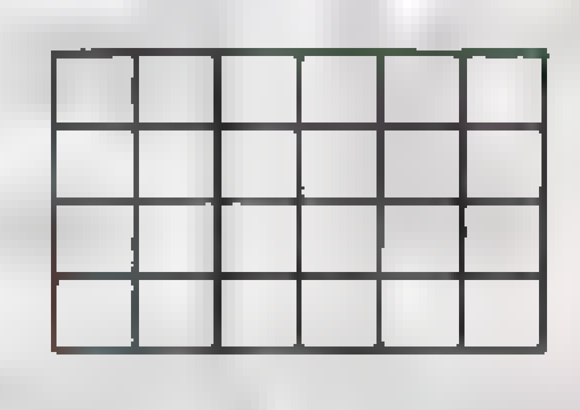
Self - check on lesson (38, 39, 40)

1 Use the distributive property to find :

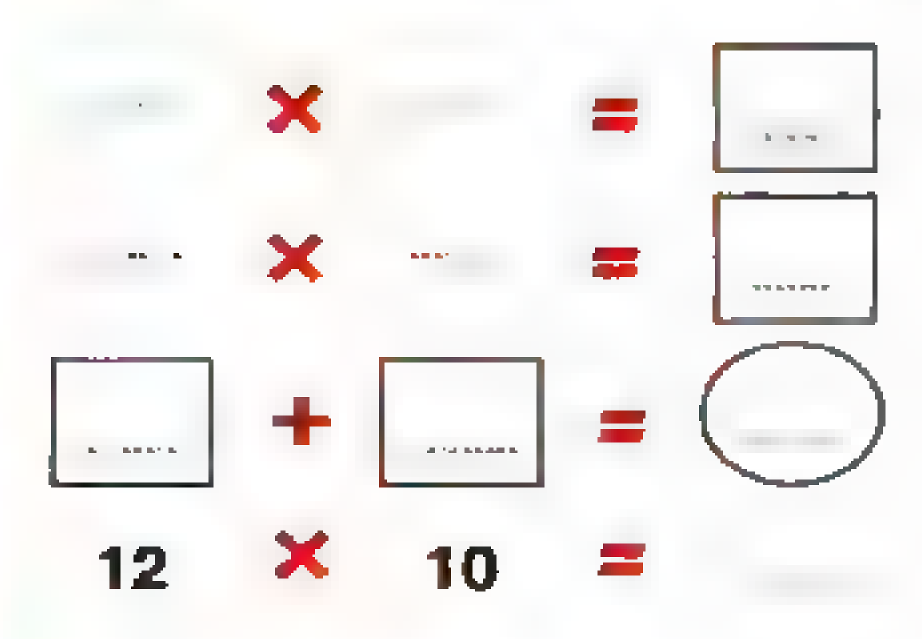


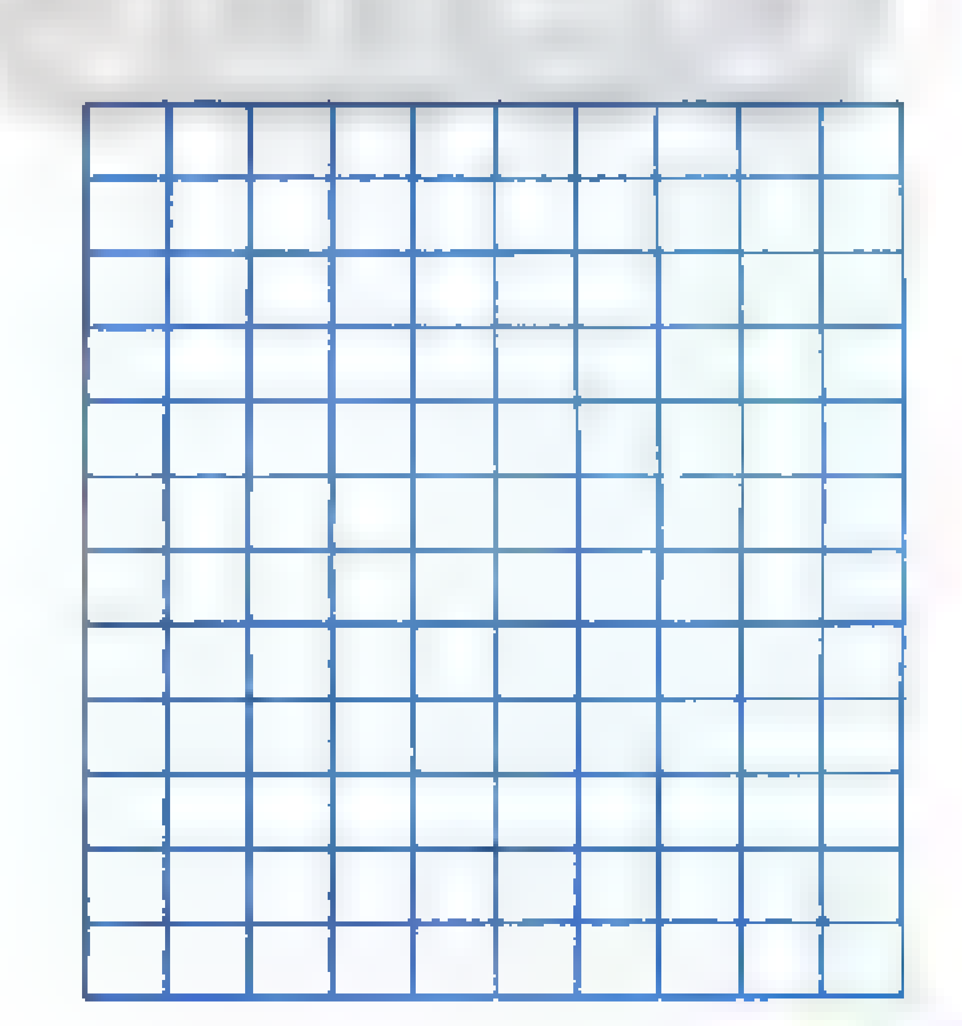


6 × 10 =



4 × 6 =





12 × 10 =

BAKKAR

The polygons

2 Use the distributive property to find :

$5 \times 9 = 5 \times (5 + \ldots)$
$= 5 \times 5 + 5 \times \ldots$
$= \ldots + \ldots$
$= \ldots$

$7 \times 8 = 7 \times (4 + \ldots)$
$= 7 \times 4 + 7 \times \ldots$
$= \ldots + \ldots$
$= \ldots$

$9 \times 9 = 9 \times (6 + \ldots)$
$= 9 \times 6 + 9 \times \ldots$
$= \ldots + \ldots$
$= \ldots$

$11 \times 5 = 11 \times (3 + \ldots)$
$= 11 \times \ldots + 11 \times \ldots$
$= 33 + \ldots$
$= \ldots$

$8 \times 6 = 8 \times (\ldots + 3)$
$= 8 \times \ldots + \ldots \times 3$
$= \ldots + \ldots$
$= \ldots$

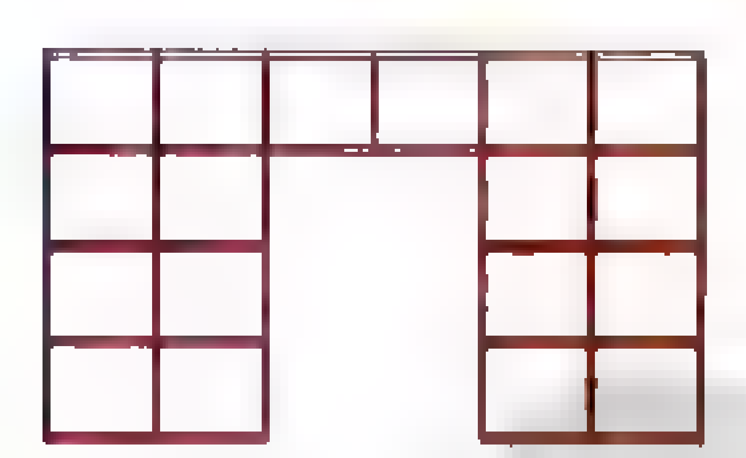
$12 \times 6 = 12 \times (4 + \ldots)$
$= 12 \times 4 + 12 \times \ldots$
$= \ldots + \ldots$
$= \ldots$

$9 \times 12 = 9 \times (2 + \ldots)$
$= 9 \times 2 + 9 \times \ldots$
$= \ldots + \ldots$
$= \ldots$

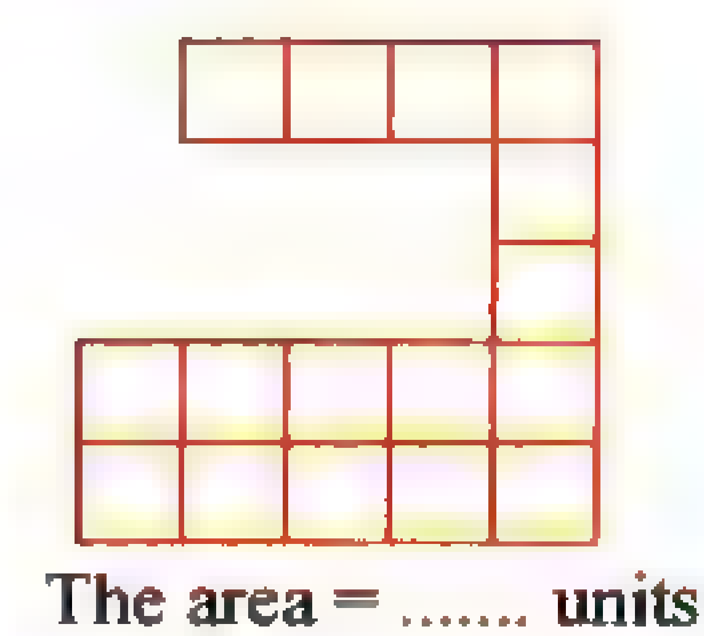
$1 \times 12 = 1 \times (10 + \ldots)$
$= 1 \times 10 + 1 \times \ldots$
$= \ldots + \ldots$
$= \ldots$

Self - check 2 Chapter 4

1 Find the area of the following shapes :

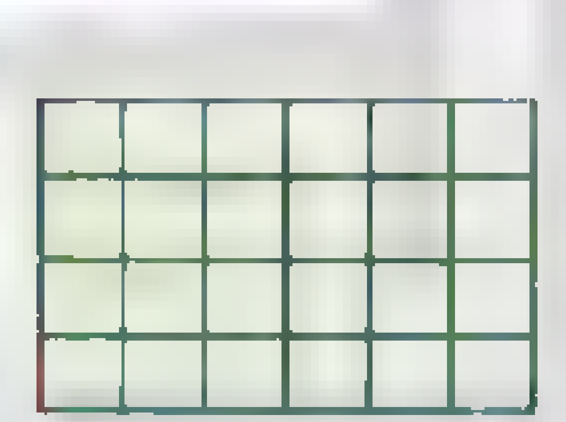


The area = ... units



The area = ... units

2 Use the distributive property to find :



× =

× =

+ =

4 × 6 =

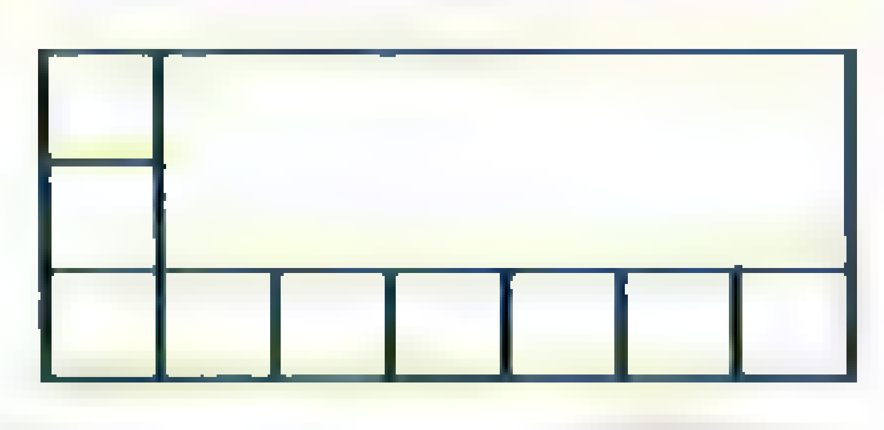
3 Jana is plant pumpkin. Each pumpkin needs one square unit . Jana wants to make the garden of 2 rows of 9 square units in each .
How many pumpkin plants can be grown in the garden?
What is the area of her garden in square units?

The solution : Number of plant = × = plant

The area of garden = square units

Self - check 2 Chapters 1,2,3,4

1 Determine the area of the following rectangles :



The area = ... × ....
= .... Square unit



The area = ... × ....
= .... Square unit

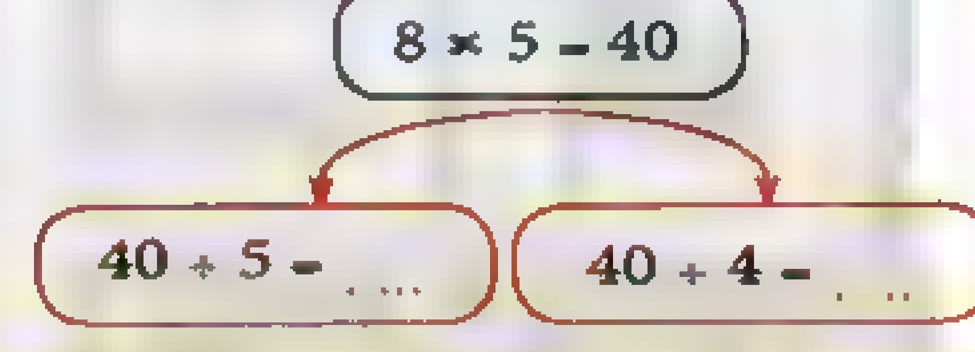
2 Complete :

$8 \times 12 = 8 \times (2 + ...)$
$= 8 \times 2 + 8 \times ......$
$= ......$

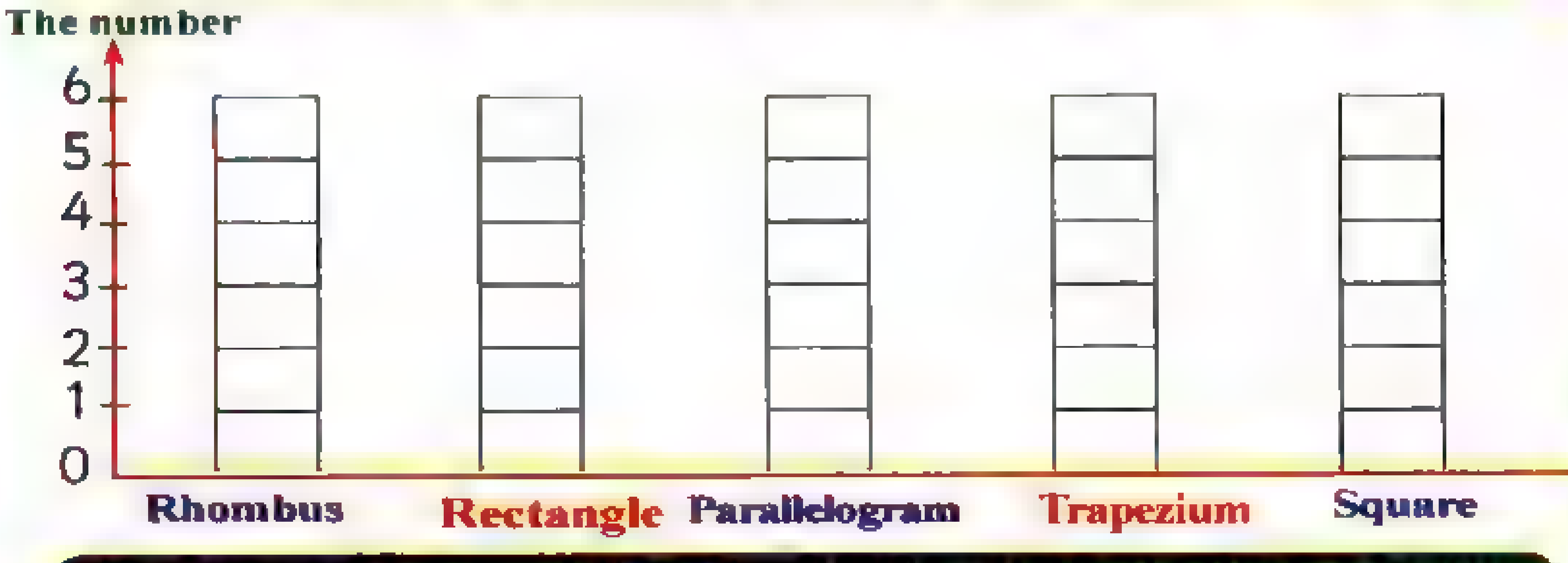
$3 \times 12 = 3 \times (10 + ...)$
$= 3 \times 10 + 3 \times ......$
$= ......$

$4 \times 7 = 28$

$28 \div 4 = ...$ $28 \div 7 = ...$



3 Represent the relation between the polygon and the number of its sides in the following bar graph :



For more exercises follow the Bakkar Self-check page (210)



The perimeter and The area

Key Vocabulary

Measurement	قياس
Multiple of a number	مضاعف العدد
Open shape	شكل مفتوح
Perimeter	محيط
Properties	الخواص
Strategy	استراتيجية
The actual	الفعلي

Cm	سم
Estimate	التقدير
Height	الإرتفاع
Length	الطول
Linear	خطي
Linear measurement	قياس خطي

تفوقك في أي عمل عليه العلامة دي

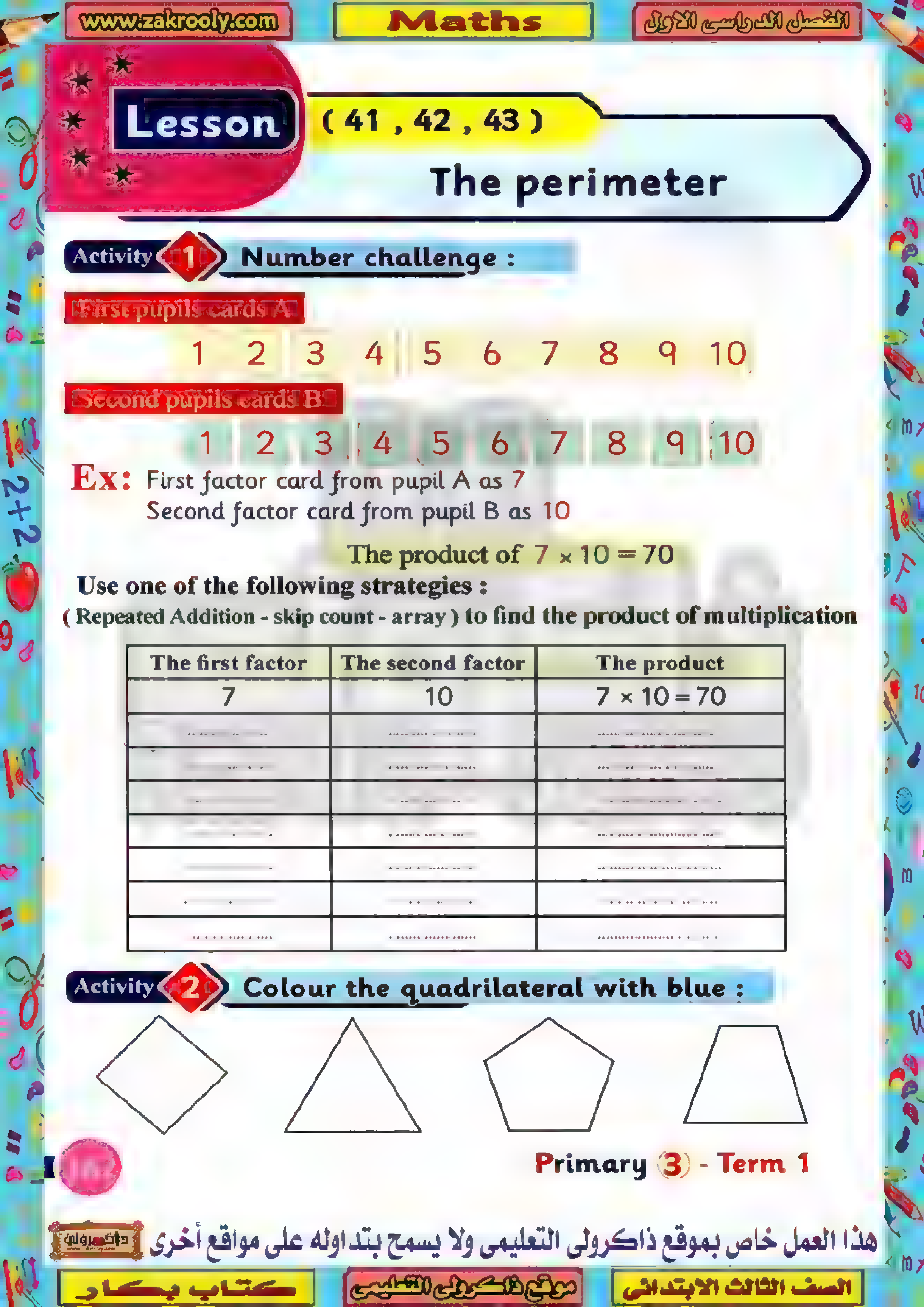
Content



Bakkar Self-Check On each lesson

Exercise inspired by Math Journal

Exercise inspired by Discover Book



Lesson (41 , 42 , 43)

The perimeter

Activity 1 Number challenge :

First pupils cards A

1 2 3 4 5 6 7 8 9 10

Second pupils cards B

1 2 3 4 5 6 7 8 9 10

Ex: First factor card from pupil A as 7
Second factor card from pupil B as 10

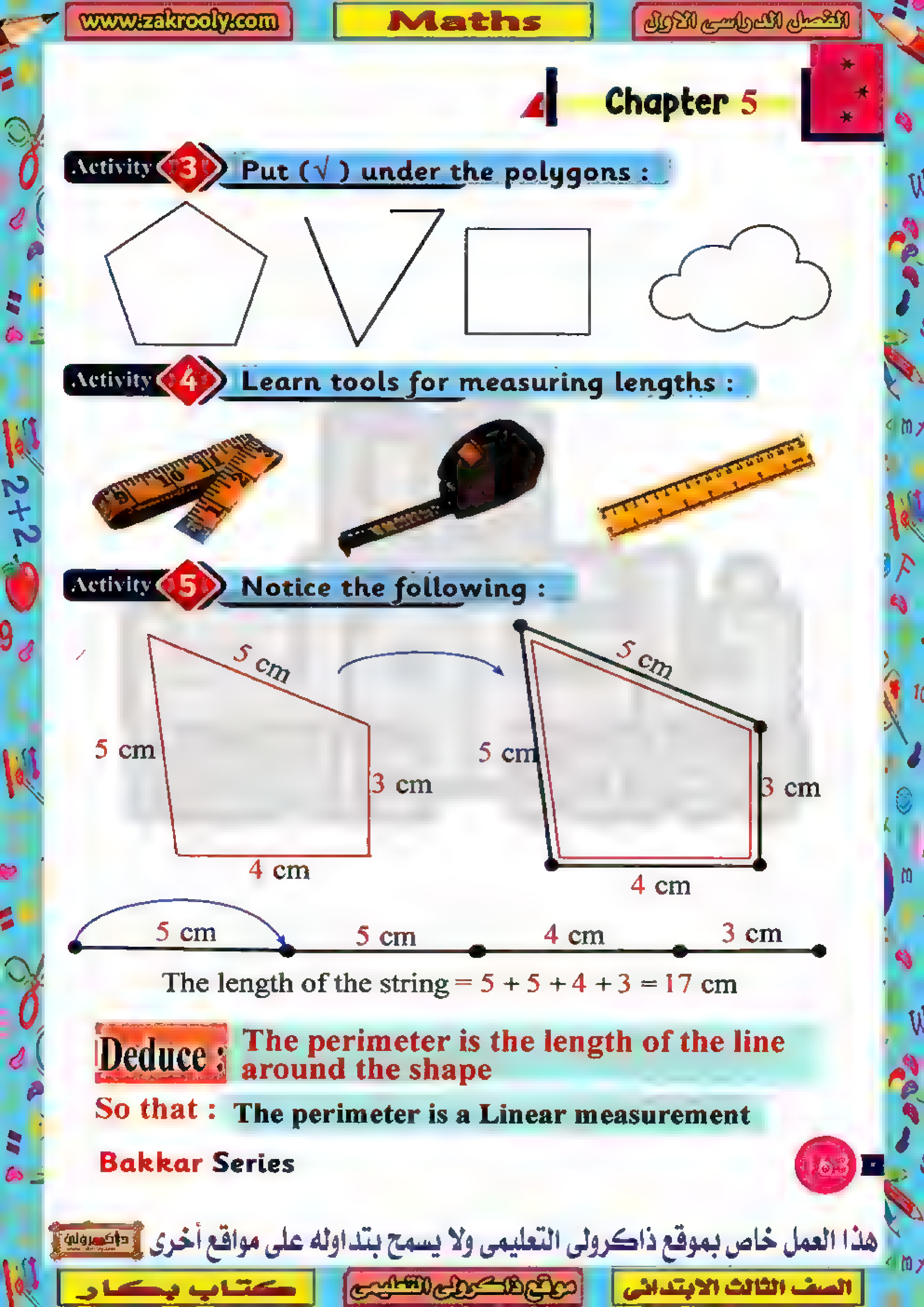
The product of $7 \times 10 = 70$

Use one of the following strategies :

(Repeated Addition - skip count - array) to find the product of multiplication

The first factor	The second factor	The product
7	10	$7 \times 10 = 70$
....	....	....
....	....	....
....	....	....
....	....	....
....	....	....
....	....	....
....	....	....

Activity 2 Colour the quadrilateral with blue :



Chapter 5

Activity 3 Put (√) under the polygons :

Activity 4 Learn tools for measuring lengths :

Activity 5 Notice the following :

The length of the string = 5 + 5 + 4 + 3 = 17 cm

Deduce : The perimeter is the length of the line around the shape

So that : The perimeter is a Linear measurement





Perimeter and Area

The perimeter : is the sum of the side lengths



Activity 6 Find the length of each side then find the perimeter (using ruler) :

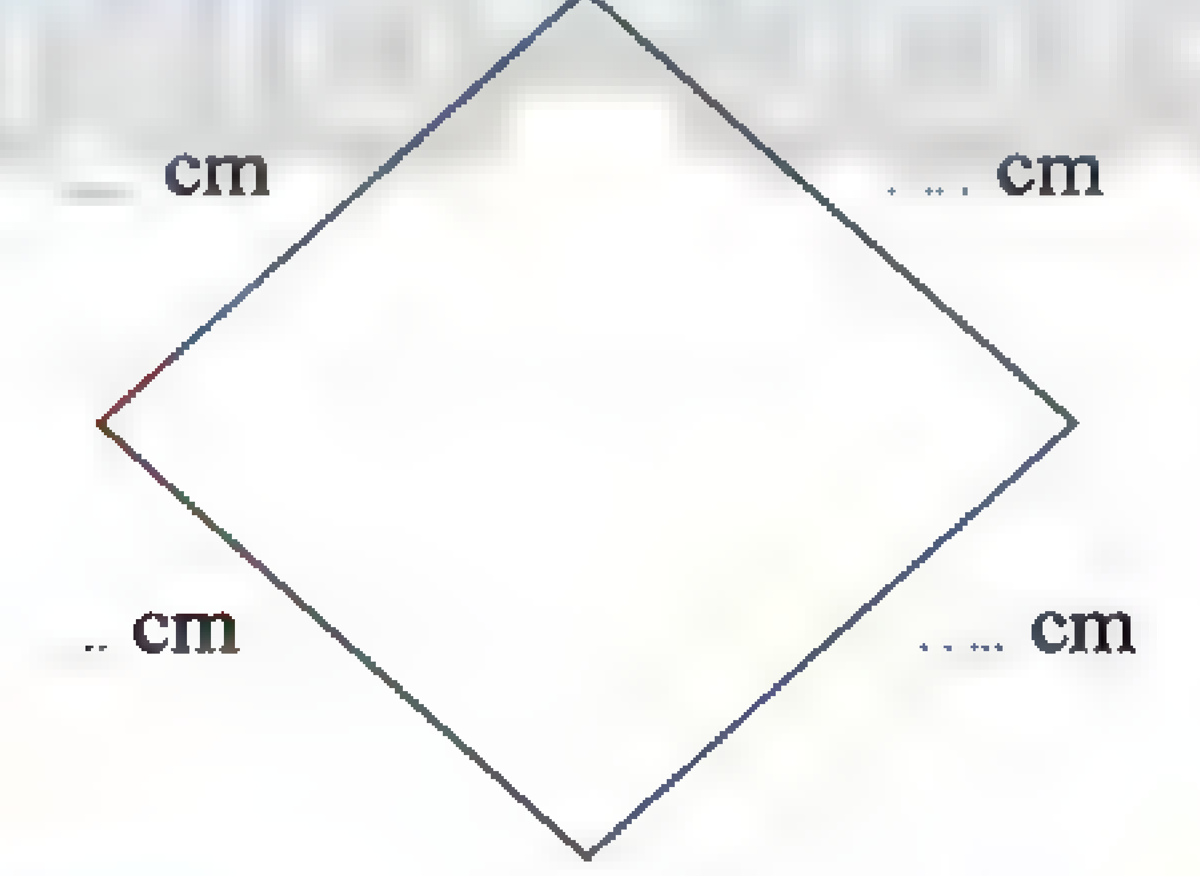
..... cm

cm   cm

.... cm

The perimeter = ... + ... + ... + ... = ... cm

Exercise 1 Find the length of each side then find the perimeter (using ruler) :



The perimeter = ... + ... + ... + ... = ... cm

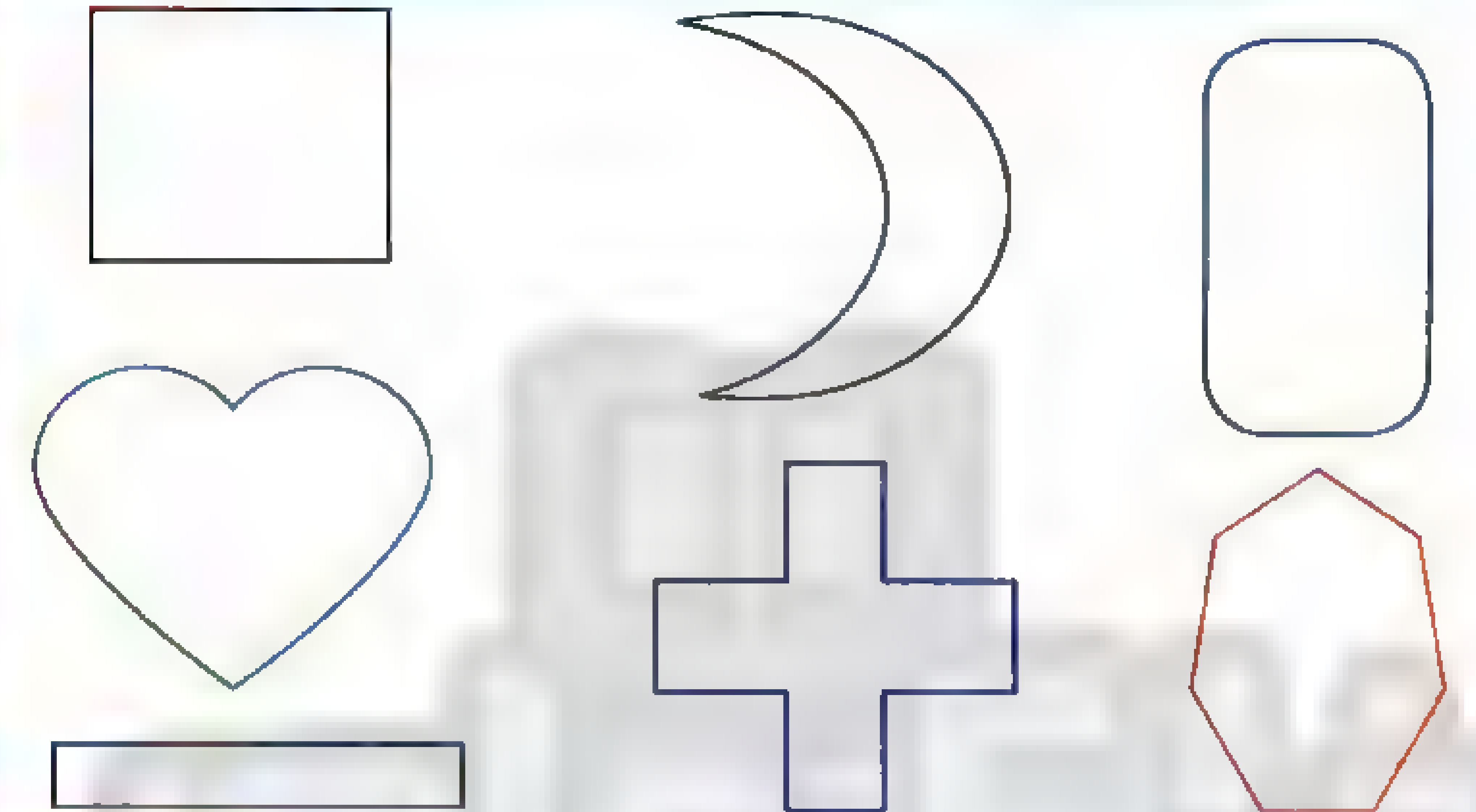




Chapter 5



Exercise 2 Circle the polygons and remove the shapes that isn't polygons :



Exercise 3 Find the length of each side then find the perimeter (using ruler) :

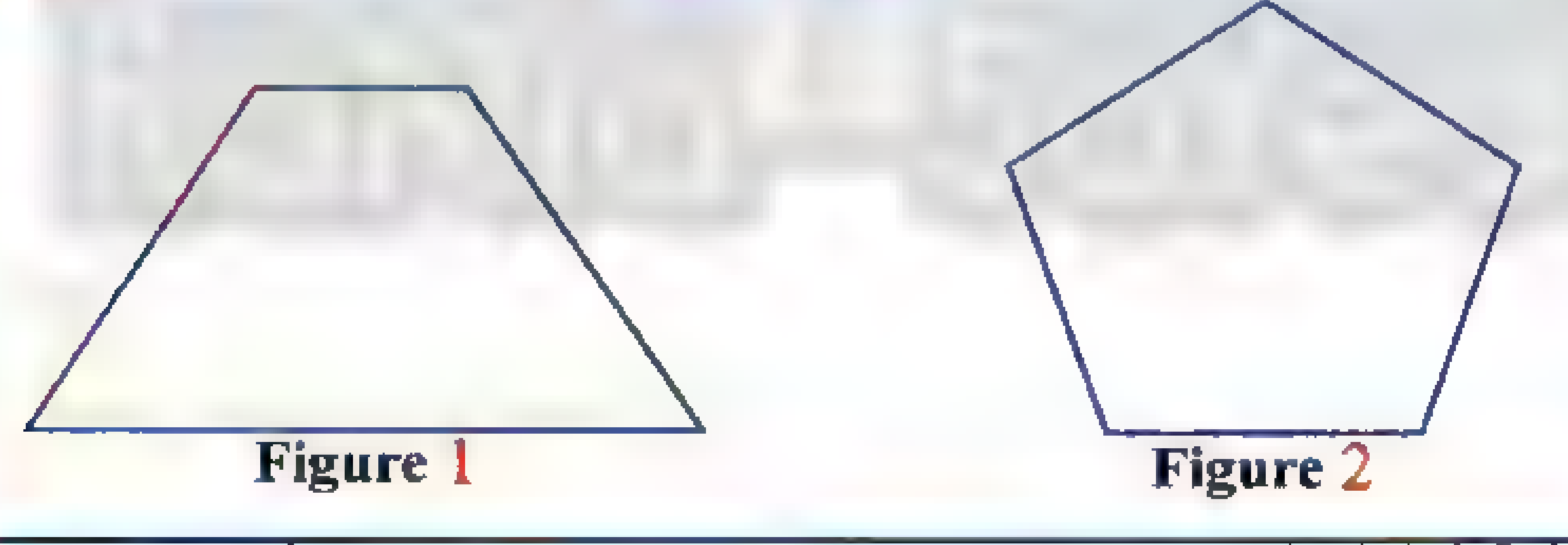


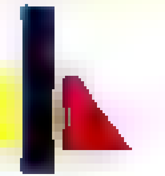
Figure 1 Figure 2

Polygon	Perimeter
Figure 1	... + ... + ... + ... = ... cm
Figure 2	... + ... + ... + ... + ... = ... cm



BAKKAR

Perimeter and Area



Remember

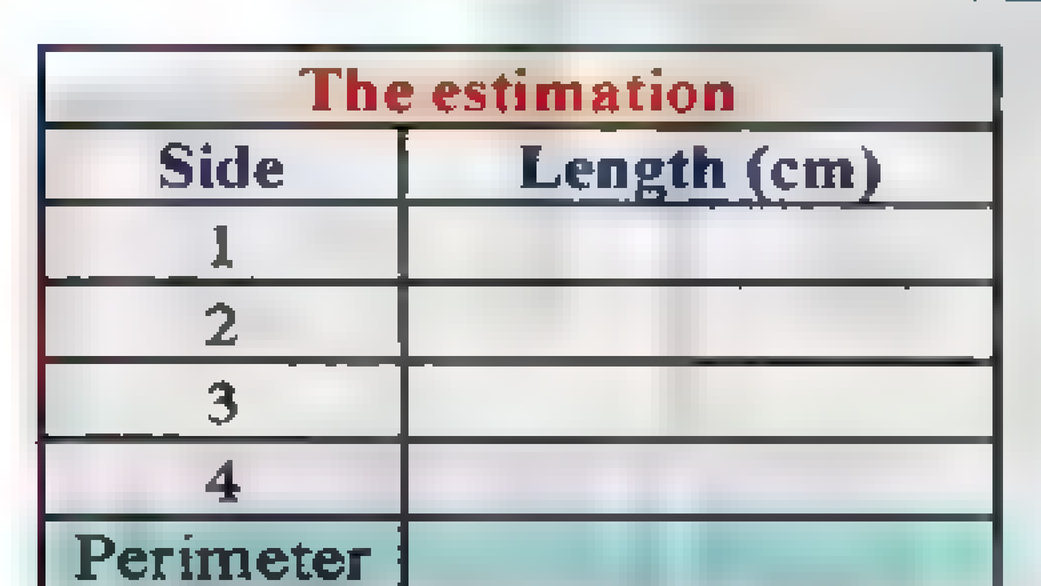


Estimate the length using finger
The length about = 3 cm



Using ruler to find the length
The length = 4 cm

Exercise 4 Estimate the perimeter of the figure then find the real perimeter :



The estimation	
Side	Length (cm)
1	
2	
3	
4	
Perimeter	

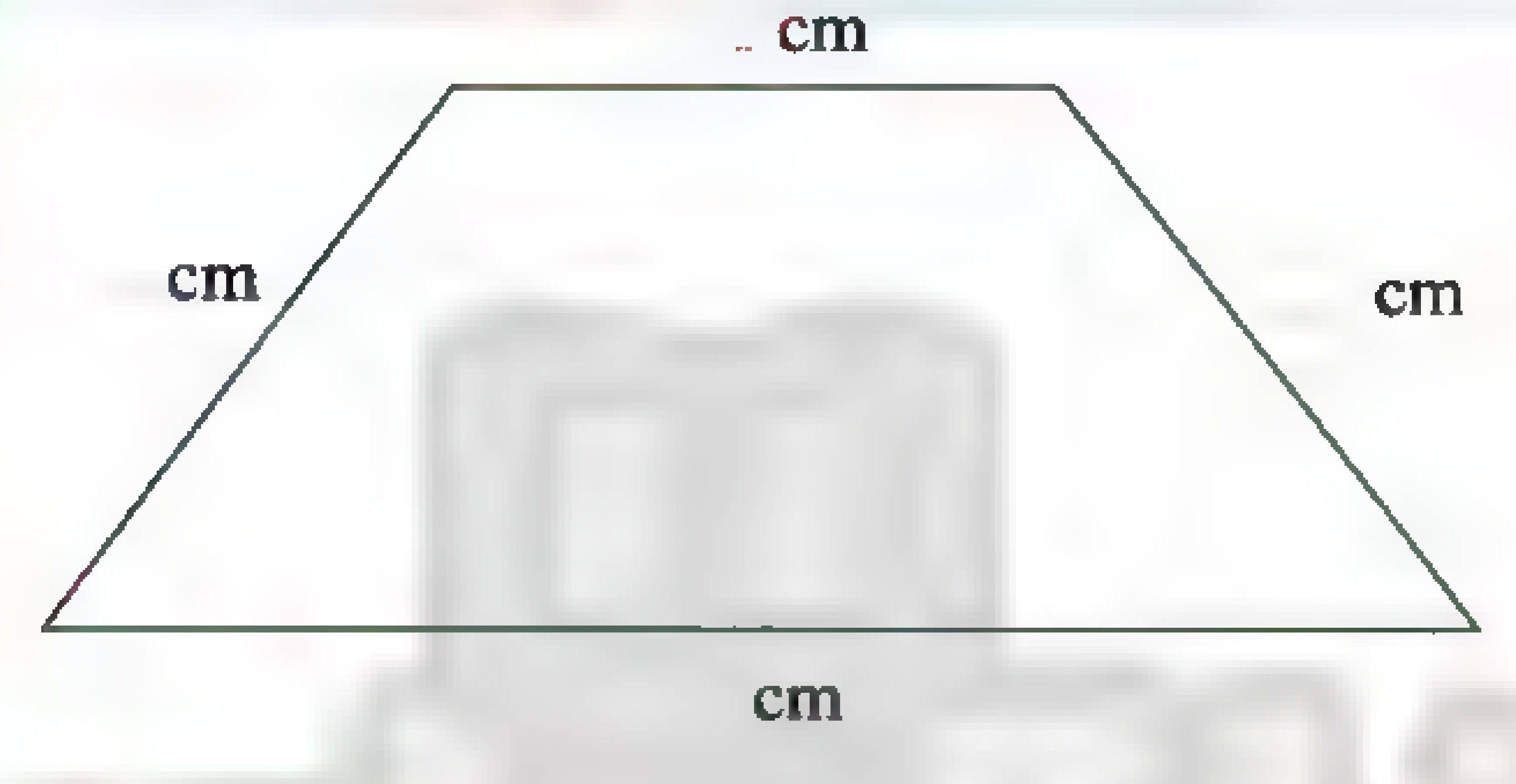
The real	
Side	Length (cm)
1	
2	
3	
4	
Perimeter	

The estimation	
Side	Length (cm)
1	
2	
3	
Perimeter	

The real	
Side	Length (cm)
1	
2	
3	
Perimeter	

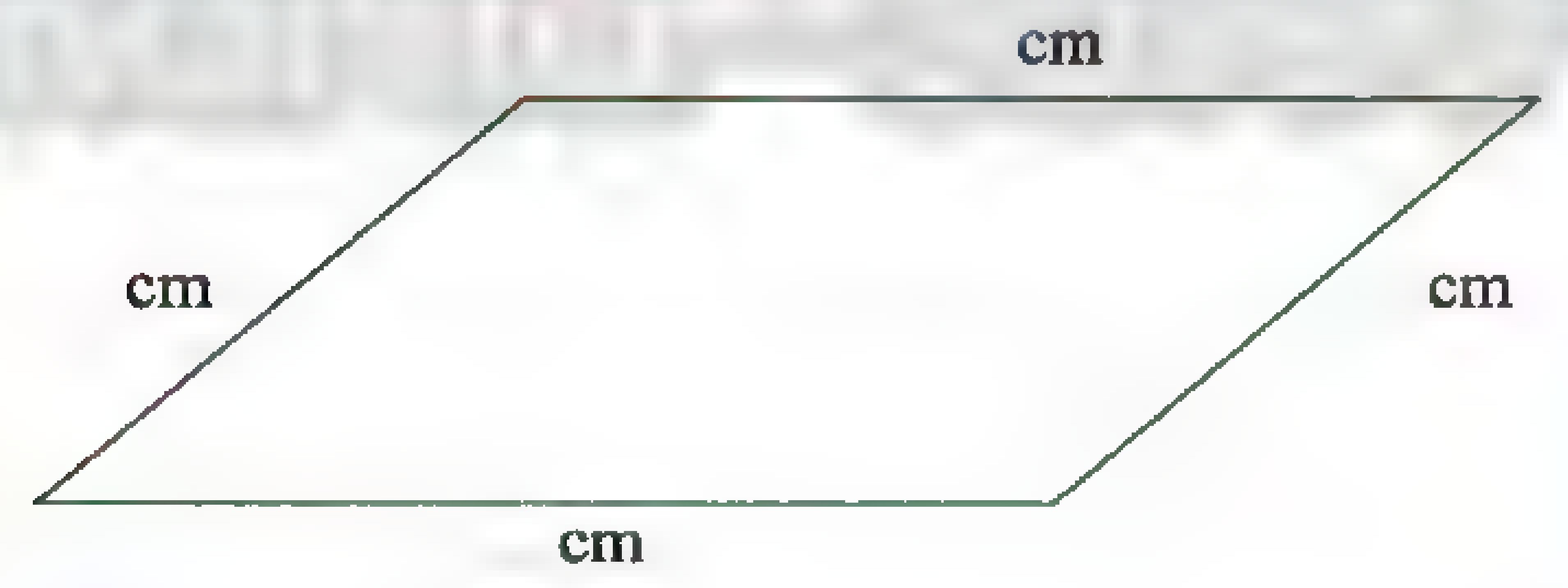
Self - check on lesson (41 , 42 ,43)

1 Find the length of each side then find the perimeter (using ruler) :

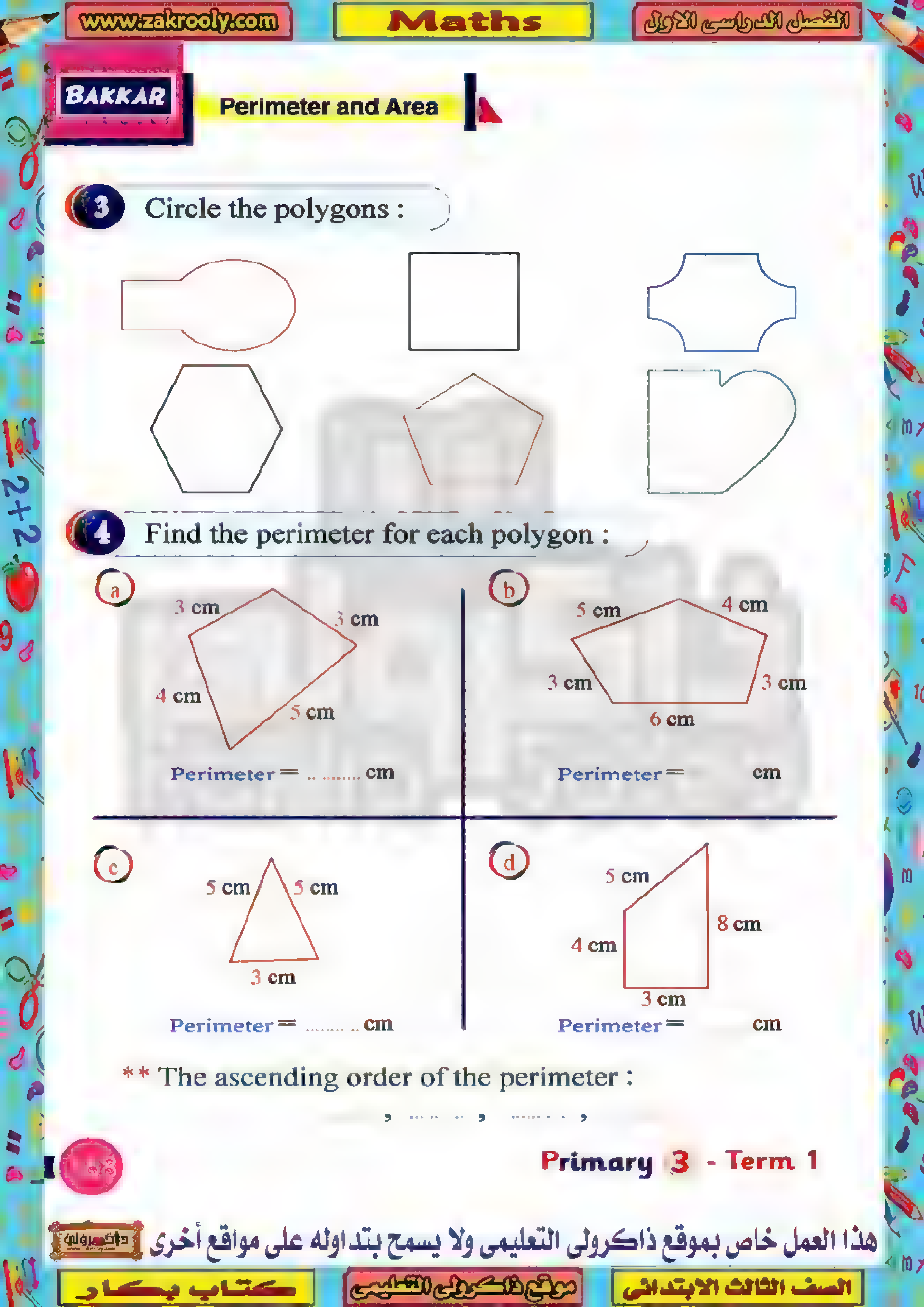


The perimeter = ... + ... + ... + ... = ... cm

2 Find the length of each side then find the perimeter (using ruler) :



The perimeter = ... + ... + ... + ... = ... cm



Perimeter and Area

3 Circle the polygons :

4 Find the perimeter for each polygon :

(a) Perimeter = ... cm

(b) Perimeter = ... cm

(c) Perimeter = ... cm

(d) Perimeter = ... cm

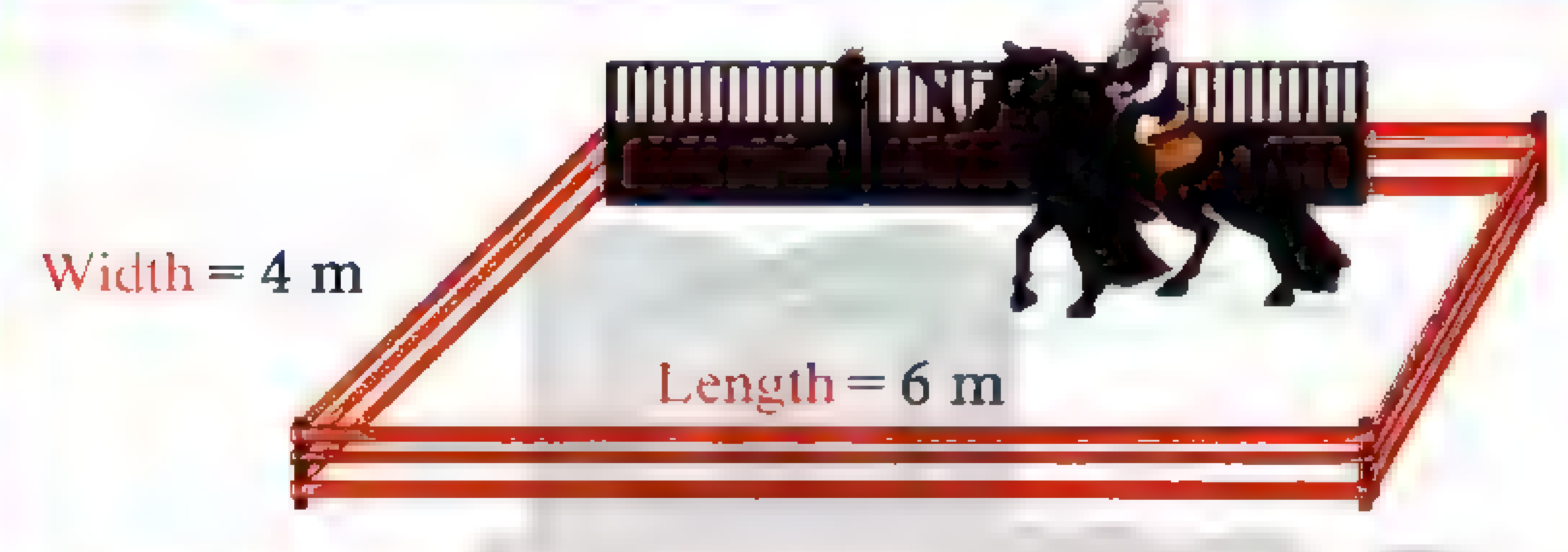
** The ascending order of the perimeter :

.... , ... , ... , ...

Lesson (44 , 45 , 46)

The diffrente between the perimeter and the area

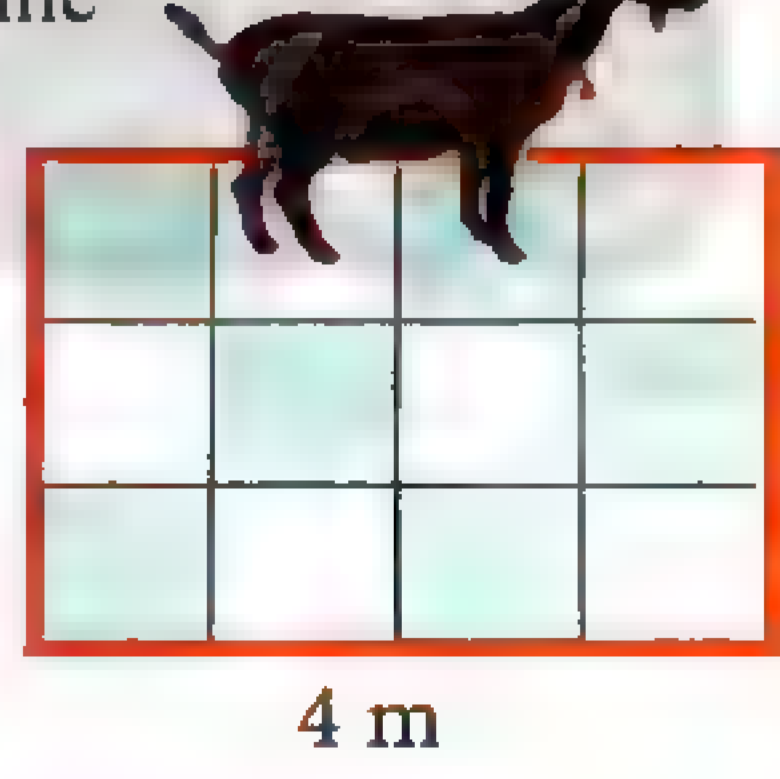
Activity 1 from the figure find the length of the fence :



The length of the fence (The perimeter) = 4 + 4 + 6 + 6 = 20 m

Activity 2 Find the area and the perimeter of the following Hunger :

The perimeter : the length of the outer line



The perimeter (The length of the fence)
= 3 + 3 + 4 + 4 = 14 m

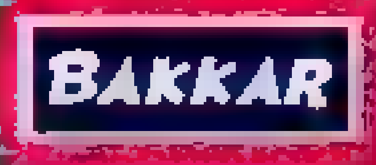
Area : number of units

Area (number of units) = 3 × 4
= 12 square meter

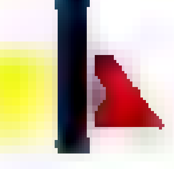
Deduction : The perimeter is linear measurement

But The area in not linear measurement



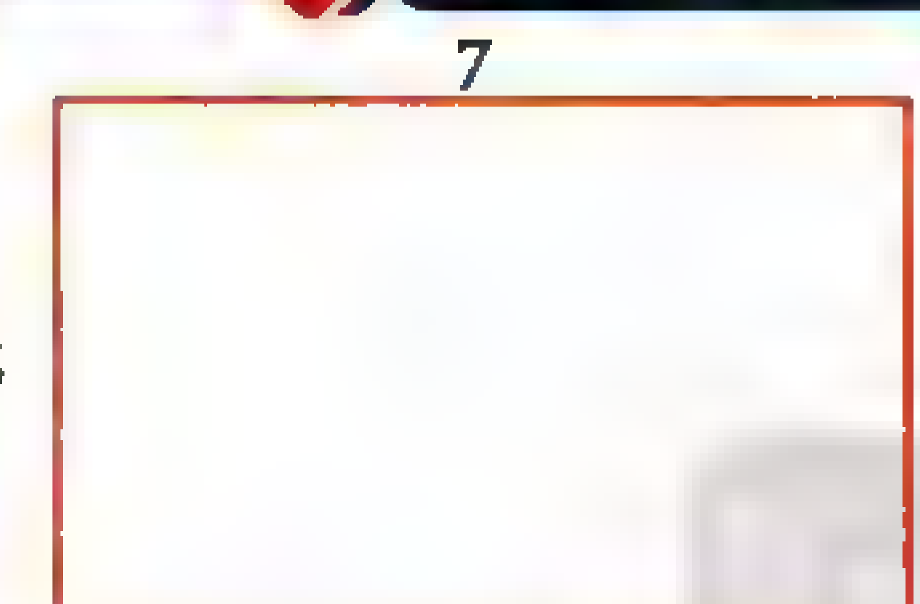


Perimeter and Area



Strategies for finding Area of rectangle

Activity 3 Find the area of the following rectangle :



7 (top), 5 (side) — grid of 5 rows × 7 columns

Number of units strategy

Area of rectangle = (No. units)

= 35 square units

Array strategy

Area of rectangle

= No. rows × No. columns

= 5 × 7 = 35 square units

Rule strategy

Area of rectangle = length × width

= 7 × 5 = 35 square units

So Area of rectangle = Length × Width

Activity 4 Find the area of the square :

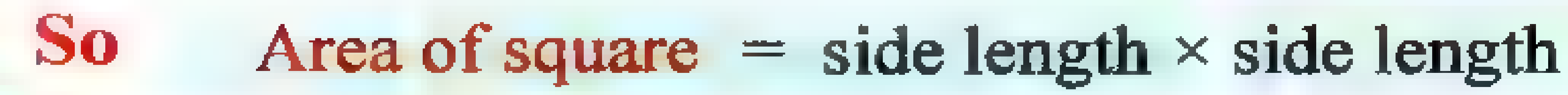
Area of square = side length × it self

= 5 × 5

= ...... square meter



5 m (top), 5 m (side)



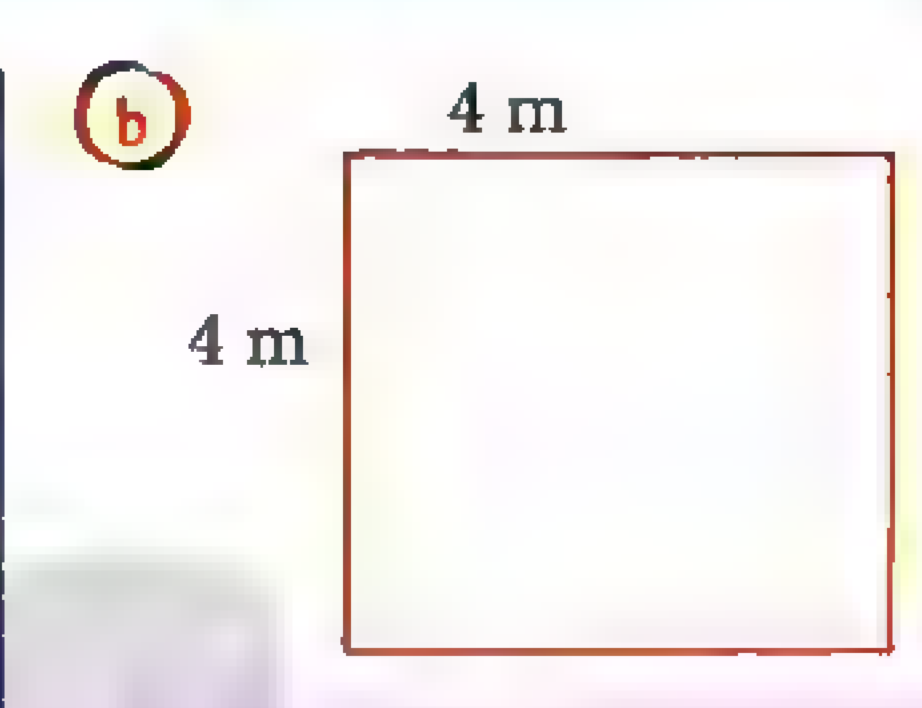
So Area of square = side length × side length





Chapter 5

Exercise 1 Find the perimeter and the area of the following :



(a) 3 m, 5 m

The perimeter

= ...... + ... + ... + ... = ... m

Area of rectangle = L × W

= ...... × ......

= ...... square meter

(b) 4 m, 4 m

The perimeter

= ...... + ... + ... + ... = ... m

Area of square

= side length × it self

= ...... × ...... = ... square meter



(c) 7 m, 4 m

The perimeter

= ...... + ... + ... + ... = ... m

Area of rectangle = L × W

= ...... × ......

= ...... square meter

(d) 3 m, 3 m

The perimeter

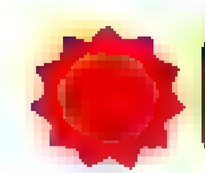
= ...... + ... + ... + ... = ... m

Area of square

= side length × it self

= ...... × ...... = ... square meter

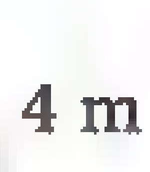


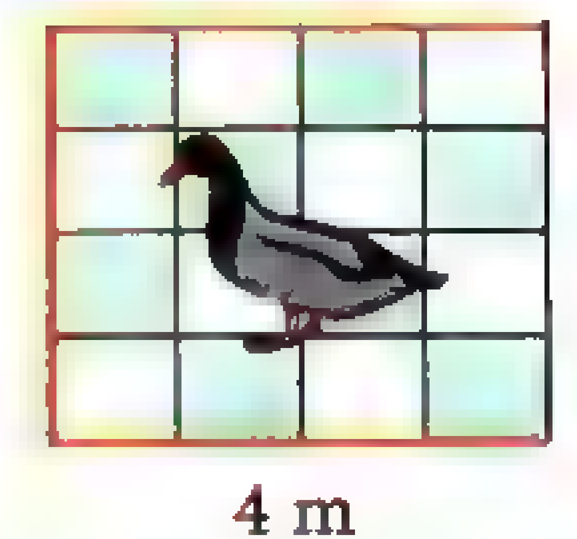


Perimeter and Area

Activities from Math Journal

Activity 5 Find the perimeter and the area of the following :





The perimeter (The length of the fence)

= ...... + ... + ... + ...

= ...... m

The area (number of squares)

= ...... × ......

= ...... square meter

Activity 6 Find the perimeter and the area of the following :





The perimeter (The length of the fence)

= ...... + ... + ... + ...

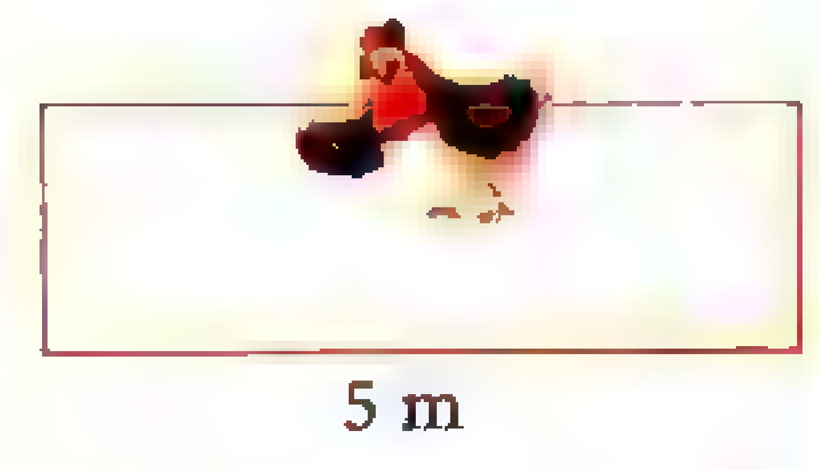
= ...... m

The area (number of squares)

= ...... × ......

= ...... square meter

Activity 7 Find the perimeter and the area of the following :



The perimeter (The length of the fence)

= ...... + ... + ... + ...

= ...... m

The area (number of squares)

= ...... × ......

= ...... square meter







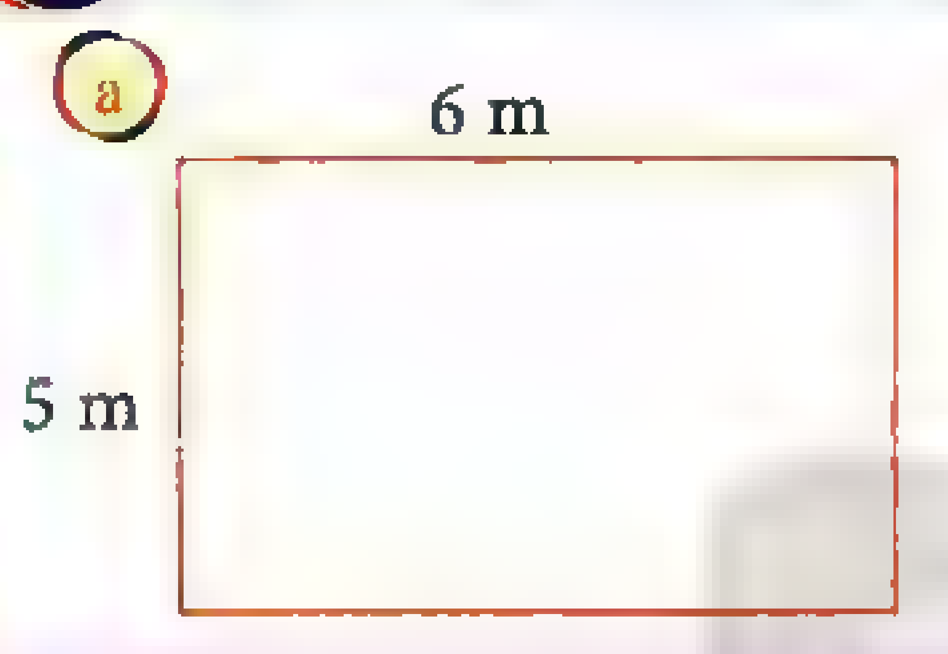
Self - check on lesson (44 , 45 , 46)

1 Find the perimeter and the area of the following :

ⓐ

6 m

5 m



The perimeter

= ...... + ... + ... + ... = ... m

Area of rectangle = L × W

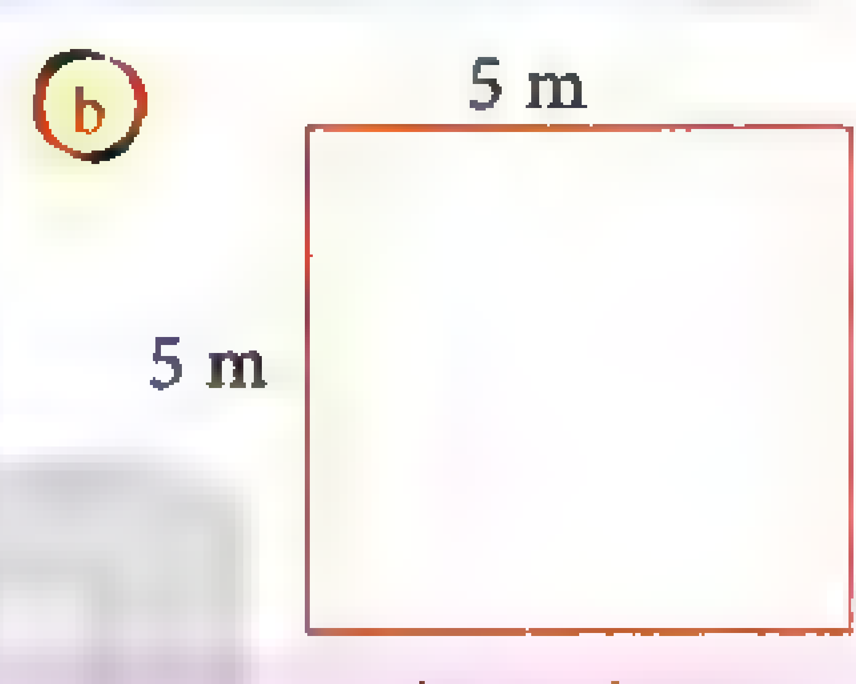
= ...... × ......

= ...... square meter

ⓑ

5 m

5 m



The perimeter

= ...... + ... + ... + ... = ... m

Area of square

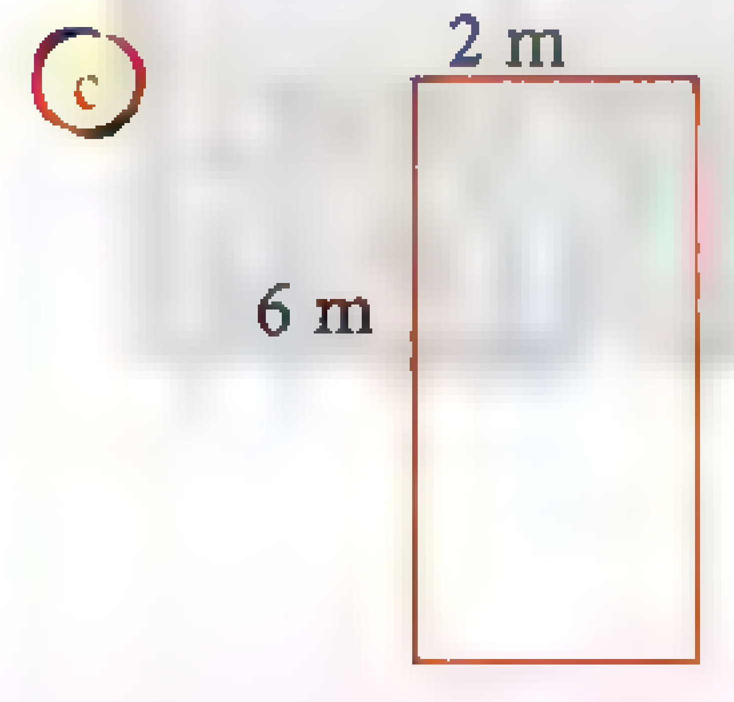
= side length × it self

= ...... × ...... = ... square meter

ⓒ

2 m

6 m



The perimeter

= ...... + ... + ... + ... = ... m

Area of rectangle = L × W

= ...... × ......

= ...... square meter

ⓓ

7 m

7 m

The perimeter

= ...... + ... + ... + ... = ... m

Area of square

= side length × it self

= ...... × ...... = ... square meter

BAKKAR

Perimeter and Area

2 Which is the greater in area ?

Fig 1: 8 m, 5 m

Fig 2: 8 m, 3 m

The area = ... square meter

The area = ... square meter

The greatest in area : ......

3 Find the difference between the area of the following :

Fig 1: 7 m, 4 m

Fig 2: 4 m, 4 m

The area = ... square meter

The area = ... square meter

The difference between the area = ... - ...... = ... square meter

4 Arrange the following figures according to its area ascendingly :

Fig 1 | Fig 2 | Fig 3 | Fig 4

The order = ... , ... , ... , ...

5 Find the area of the following :

Area of square = ... × ...... = ... square meter

Area of rectangle = ... × ...... = ... square meter

Area of figure = ... + ... = ... square meter

3 m 3 m 3 m 6 m



Lesson (47 , 48 , 49)

Solving story problems



Activity 1 Complete : Math Journal

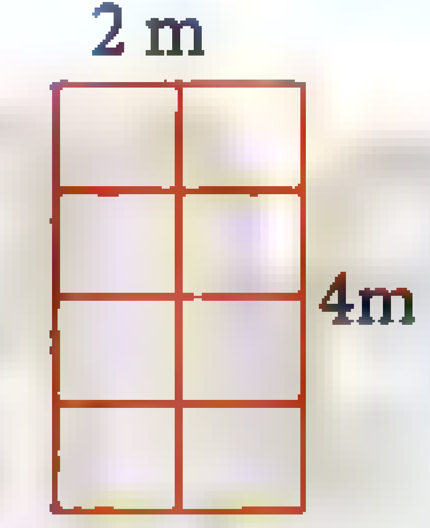
(a) 27 ÷ 3 = ...
(b) 44 ÷ 11 = ..
(c) 36 ÷ 9 = ...
(d) 48 ÷ 12 = ...
(e) 21 ÷ 3 = ...
(f) 36 ÷ 6 =

Activity 2 Find the perimeter and the area of the following :



The perimeter = 1 + 1 + 8 + 8 = 18 m

The area = 1 × 8 = square meter

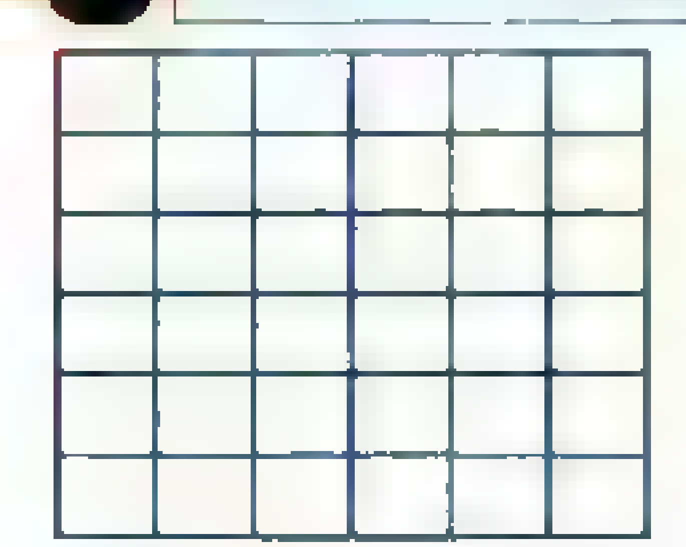


The perimeter = 4 + 4 + 2 + 2 = 12 m

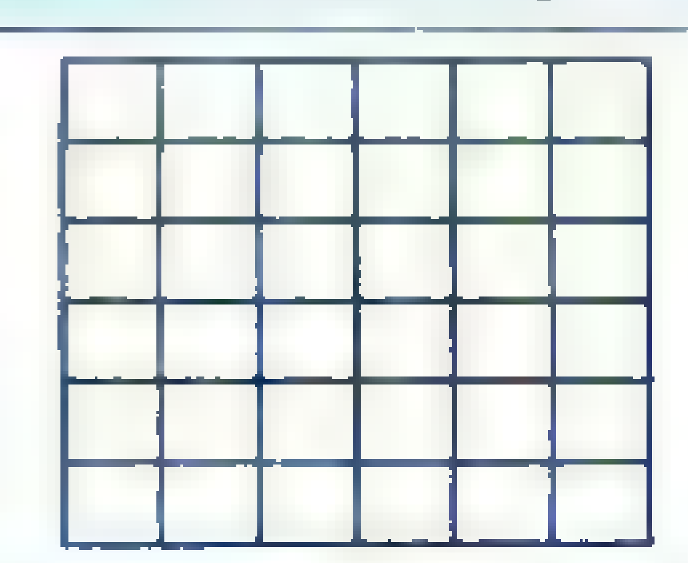
The area = 4 × 2 = 8 square meter

Notice the two rectangle have the same area but different perimeter

Exercise 1 Shade two rectangle with area 6 units and with different perimeter

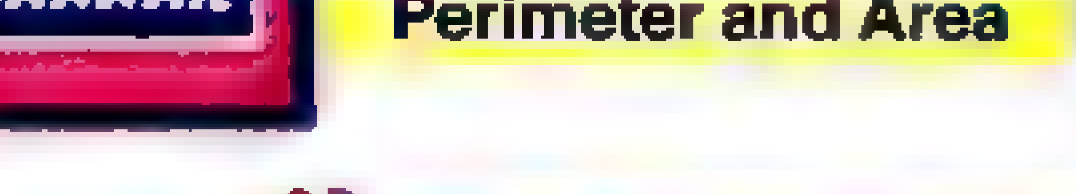


The perimeter = ... + ... + ... + ...
= .... m



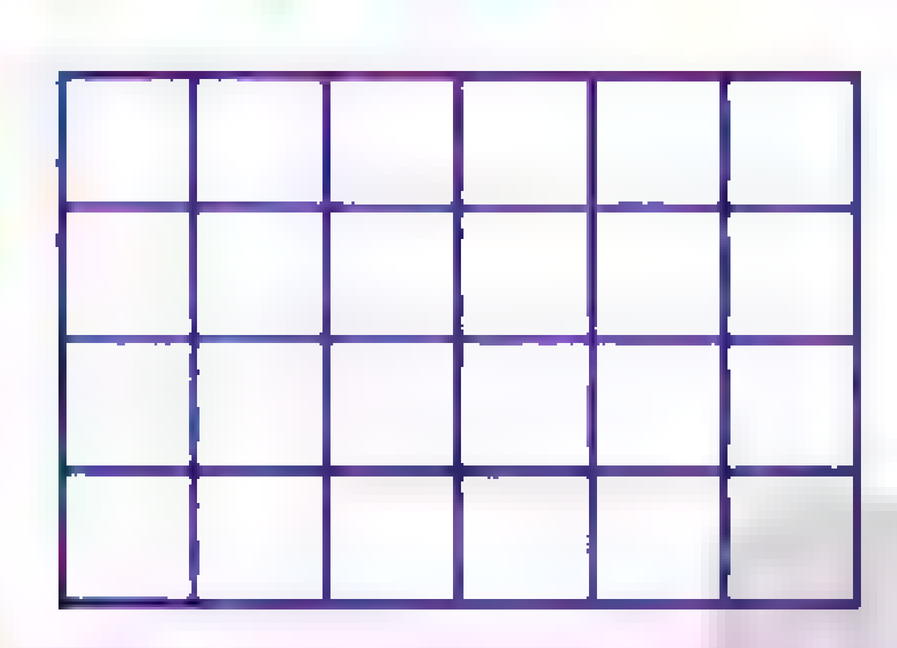
The perimeter = . + .. + +
= . m





Activity 3 Find the perimeter and the area of the following :



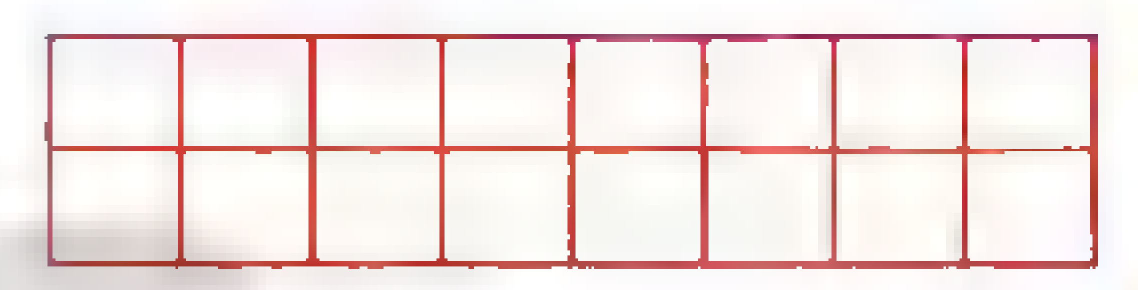


The perimeter = .. + .. + .. + ..

= .... m

The area = 4 ×

= ...... square meter



The perimeter = ... + ... + ...+ ...

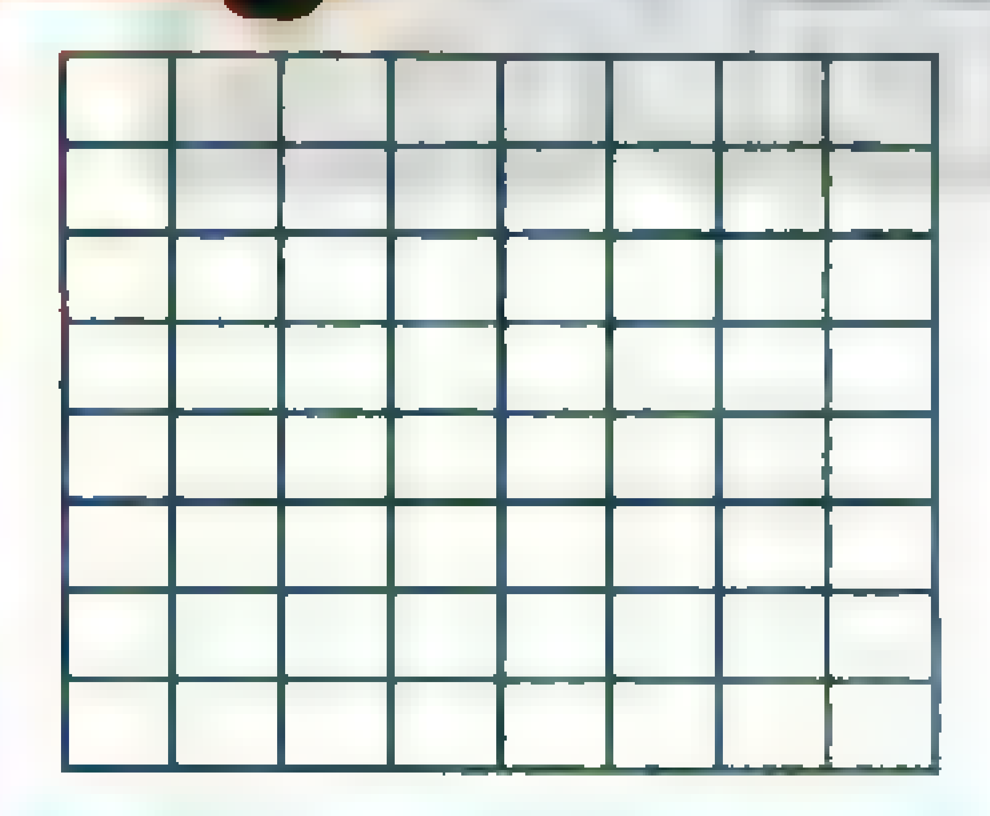
= .. m

The area = 2 ×

= square meter

Notice The two rectangle have the same perimeter and different area

Exercise 2 Shade two rectangle with perimeter 14 m but have different area :



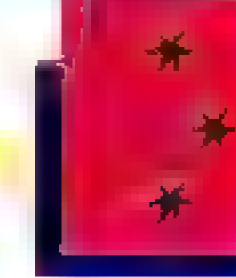
The area = ... ×

= ..... square meter

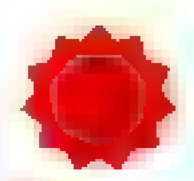


The area = ×

= ...... square meter



Chapter 5



Activities from Math Journal

Activity 4 Shaimaa is sewing a border on a square baby blanket. The length of the blanket is 45 centimetres and the width is 45 centimetres. How long will the border be?

Notice : The length equal the perimeter

The perimeter = ... + ... + ... +

= ...... m

45 m
45 m



Activity 5 Farouk is building a patio. He wants the length of the patio to be 7 tiles and its width to be 6 tiles.
How many tiles will he use in all to build the patio ?

Notice : The number of tiles = the area

The area = ×

= tiles

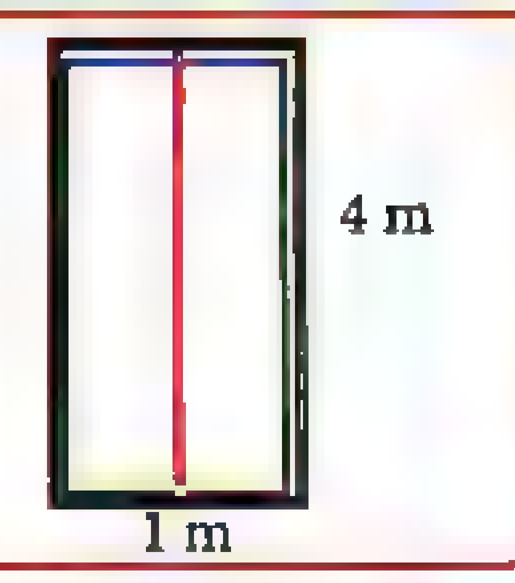


Activity 6 Omnia wants to put a wooden trim around her window. The window is 4 meters tall and 1 meter wide.
How long the wood does she need for the trim ?

Notice : The length is the perimeter

The perimeter = ... + ... + ... +

= m





Self - check on lesson (47 , 48 ,49)

1 Shade two rectangles with area 24 units and with different perimeters :

2 Shade two rectangles with perimeters 8 units and with different area :

3 A farmer is building a fence around his garden. If the garden is 8 meters long and 3 meters wide .
How long fencing does he need to buy ?

The fence length = The perimeter

= ..... + ... + ... + ...

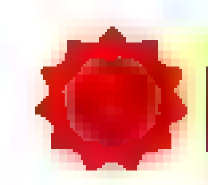
= .... m

8 m

3 m



Chapter 5



Activities from Math Journal

4 Aisha is building a fence around her garden. If the garden is 6 meters long and 5 meters wide, how long fencing does she need to buy ? and what is its area ?

The fence length = The perimeter
= + + +
= ... .. m

The area = ... × ...... = ... square meter

6 m
5 m

5 A rug is 3 meters long and 2 meters wide .
What is the area of the rug ?

The area of the rug = ... ×
= square meter

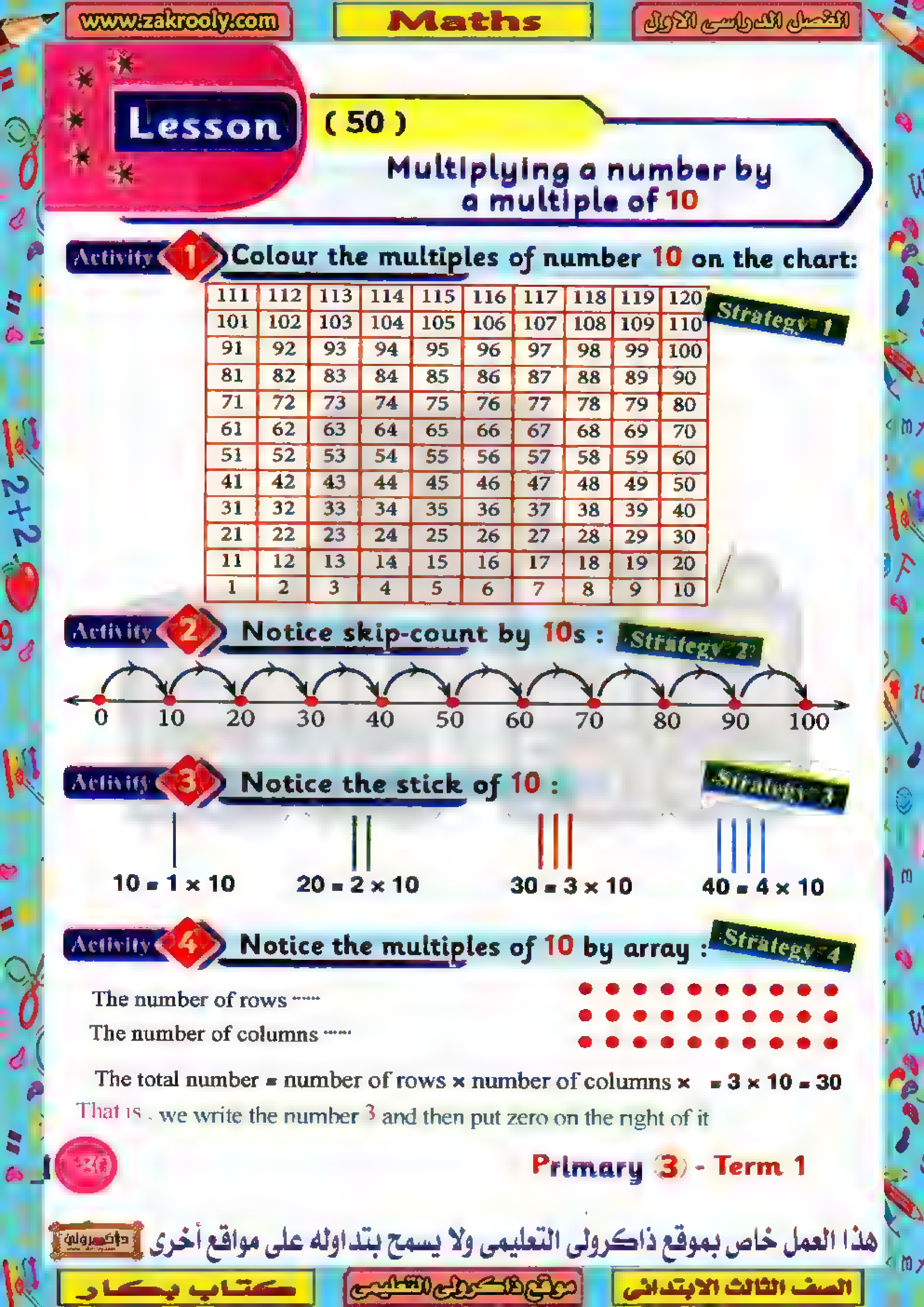
2 m
3 m

6 Ahmad puts a carpet in the room. The length of the room is 6 meters and its width is 3 meters. How many square meters of carpet does Ahmed need to buy to cover the floor ?

The area = ×
= square meter

6 m
3 m





Lesson (50)

Multiplying a number by a multiple of 10

Activity 1 Colour the multiples of number 10 on the chart: Strategy 1

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Activity 2 Notice skip-count by 10s : Strategy 2

0 10 20 30 40 50 60 70 80 90 100

Activity 3 Notice the stick of 10 : Strategy 3

$10 = 1 \times 10$ $20 = 2 \times 10$ $30 = 3 \times 10$ $40 = 4 \times 10$

Activity 4 Notice the multiples of 10 by array : Strategy 4

The number of rows ......

The number of columns ......

The total number = number of rows × number of columns × = $3 \times 10 = 30$

That is , we write the number 3 and then put zero on the right of it



Chapter 5



Exercise 1 Complete multiplication facts of 10 : **Strategy 5**



× 10	0	1	2	3	4	5	6	7	8	9
	0			30					80	

Activity 5 Use one strategy to find 3×70 :

The solution :

Stick of 10 strategy

70 70 70

Repeated addition strategy $3 \times 70 = 70 + 70 + 70 = 210$

write 0 then the product of 3×7

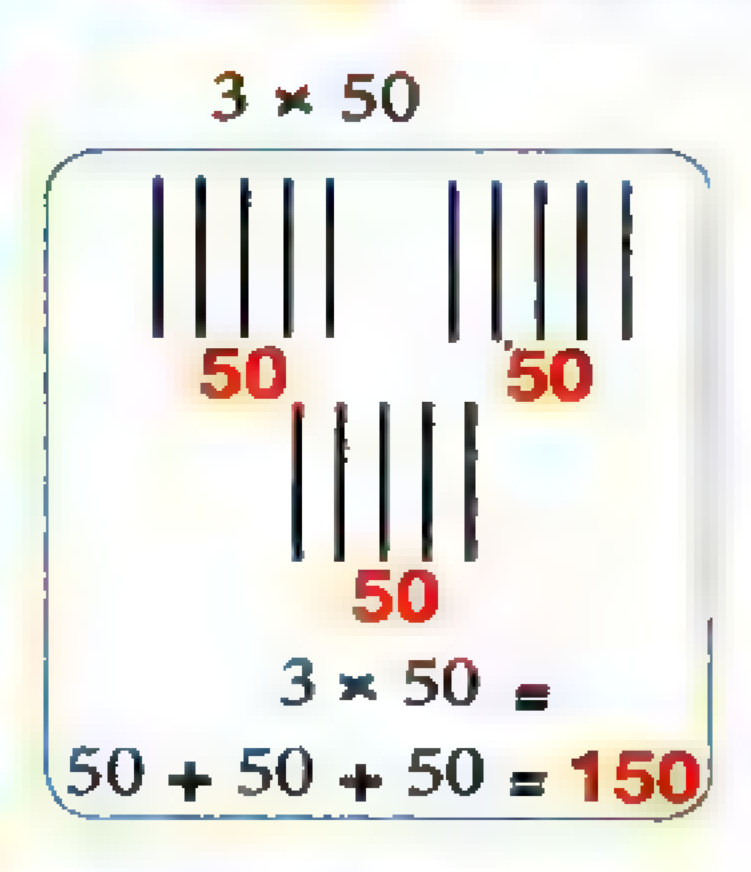
Multiples of 10 strategy $3 \times 70 = 3 \times 7 \times 10 = 21 \times 10 = 210$

write 21 then put 0 at its right 21

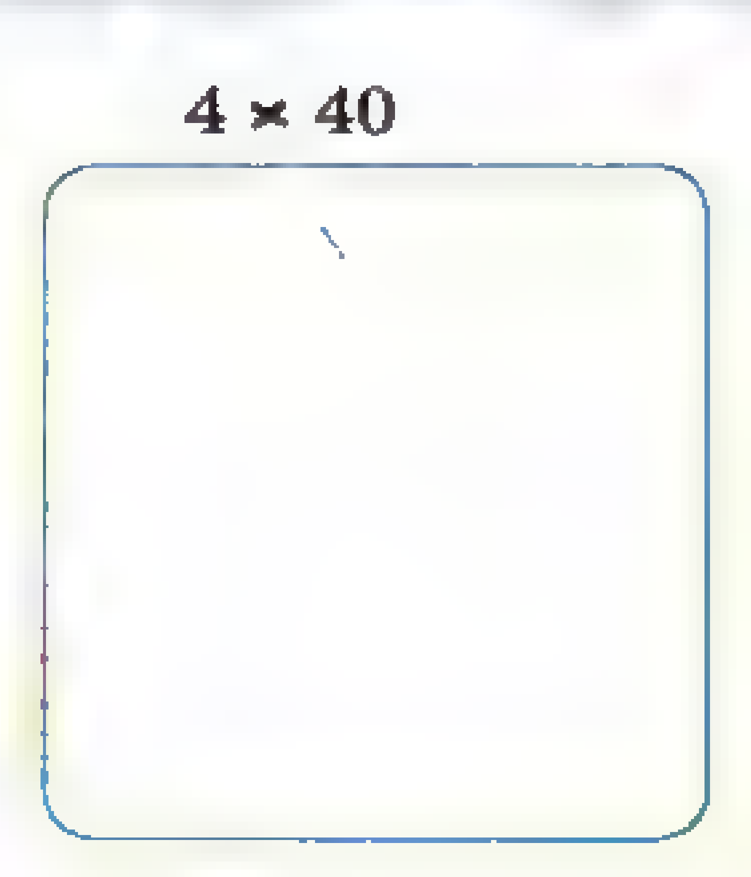
Exercise 2 Draw sticks to show the product of the following as EX :

Math Journal

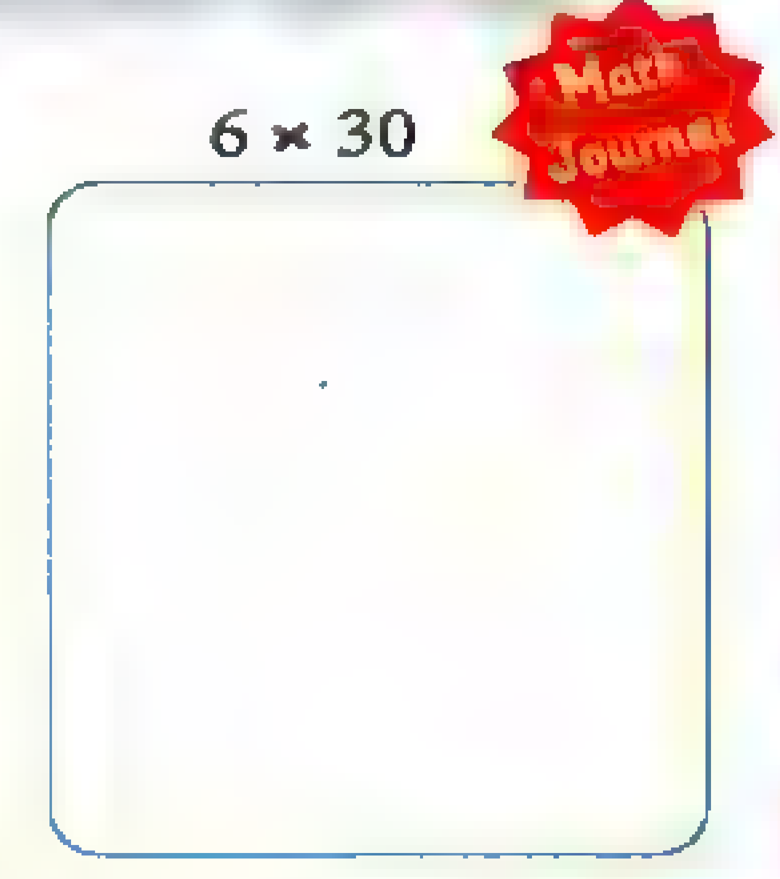
3×50



4×40



6×30





Self – check on lesson (50)

1 Complete as in (a) :

(a) 5 × 10 = 10 × 5 = 50
(b) 7 × ...... = 10 × ...... = 70
(c) ...... × 10 = 10 × ...... = 0
(d) 2 × ...... = 10 × ...... = ...
(e) 1 × ...... = 10 × ...... = 10
(f) 10 × 9 = 9 × ...... = ...
(g) 4 × 10 = 10 × ...... = ...
(h) 3 × ...... = 10 × 3 = ...

2 Complete as in (a) :

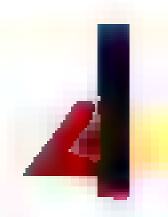
(a) 6 × 30 =

The solution : 6 × 30 = 180 (Put 0 the write the product of 6 × 3)

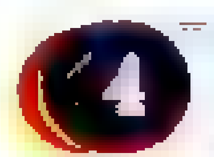
(b) 5 × 70 =
(c) 40 × 4 =
(d) 20 × 8 =
(e) 90 × 0 =
(f) 90 × 1 =
(g) 9 × 80 =
(h) 60 × 8 =
(i) 10 × 90 =

3 Complete as in (a) :

(a) 80 × 4 = 8 × ...... = ...   The solution : 80 × 4 = 8 × 40 = 320
(b) 60 × 3 = 6 × ...... = ...
(c) 90 × 6 = 9 × ...... = ...
(d) 70 × 5 = ... × 50 = ...
(e) 6 × 40 = 60 × 4 = ...
(f) 20 × 8 = 2 × ...... = ...
(g) 7 × 80 = ... × 8 = ...
(h) 90 × 9 = ... × ...... = ...
(i) 60 × 1 = 6 × ...... = ...




Chapter 5



4 Complete as in (a) :

(a) 10 × 132 =

The solution : 10 × 132 = 1320 (write the number 132 and write 0 at its right)

(b) 10 × 152 = ... (c) 237 × 10 = ...

(d) 208 × 10 = ... (e) 444 × 10 = ...

(f) 175 × 10 = ... (g) 724 × 10 = ...

(h) 750 × 10 = ... (i) 395 × 10 = ...



5 Complete as in (a) :





(a) 34 × 100 = 3400

The solution : 34 × 100 = 3400 (write the number 34 and write 00 at its right)

(b) 79 × 100 = ... (c) 100 × 15 = ... (d) 25 × 100 = ...

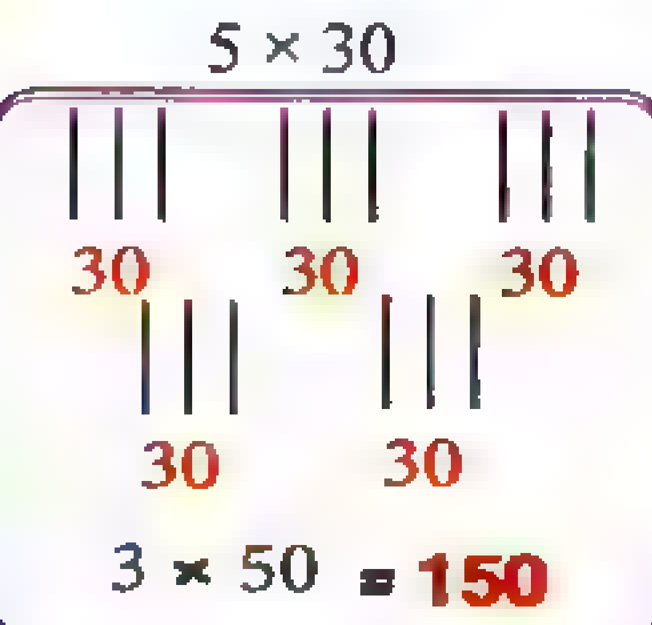
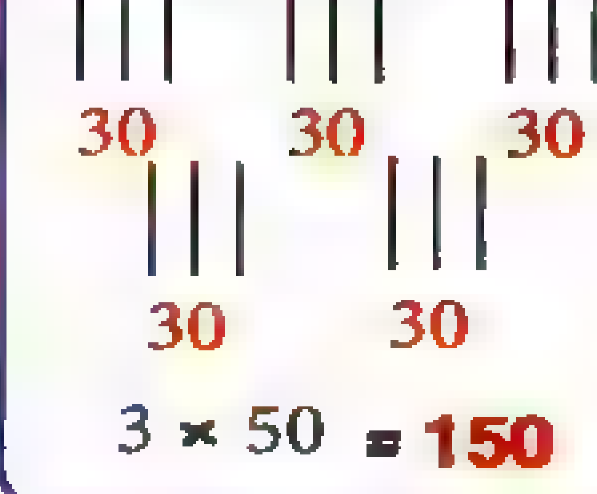
(e) 150 × 100 = ... (f) 54 × .... = 5400 (g) .... × 100 = 700

(h) 100 × .... = 16000 (i) 240 × .... = 24000 (j) 28 × .... = 2800

(k) 256 × 100 = ... (l) 1123 × 100 = ... (m) 400 × 100 = ...

6 Use stick of 10 find the following the first done for you:

5 × 30

2 × 70

3 × 60

Self - check 1 Chapters 5

1 Complete as in (a) :

(a) 7 × 10 = 10 × 7 = 70

(b) 6 × ...... = 10 × ...... = 60

(c) ...... × 10 = 10 × ...... = 30

(d) 4 × ...... = 10 × ...... = ...

(e) 5 × ...... = 10 × ...... = ...

(f) 10 × 1 = 1 × ...... = ...

(g) 9 × 10 = 10 × ...... = ...

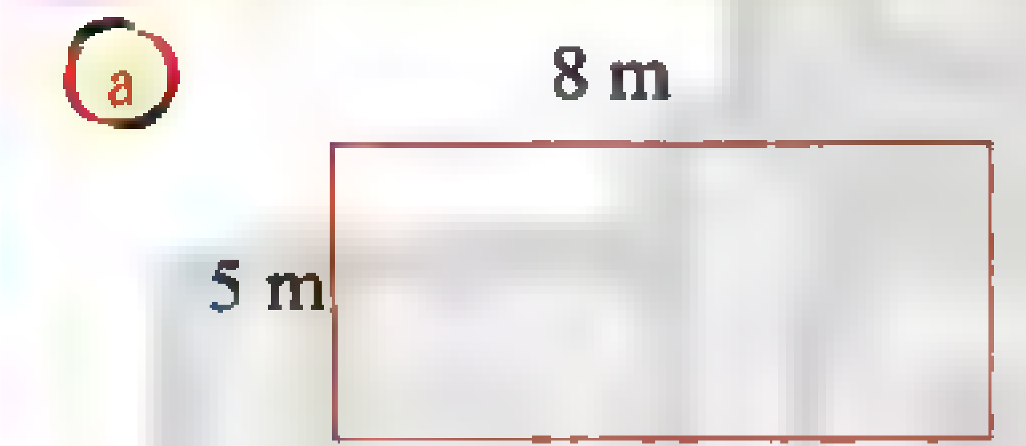
(h) 2 × ...... = 10 × 2 = ...

2 Find the perimeter and the area of the following :

(a)

8 m

5 m



The perimeter = ... + ... + ... + ...

= ...... m

The area = ... × ......

= ...... square meter



(b)

6 m

6 m

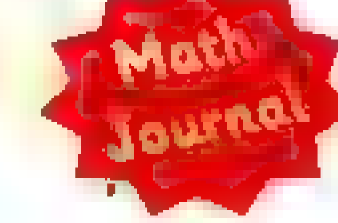
The perimeter = ... + ... + ... + ...

= ...... m

The area = ... × ......

= ...... square meter

3 Find the perimeter and the area of the following :

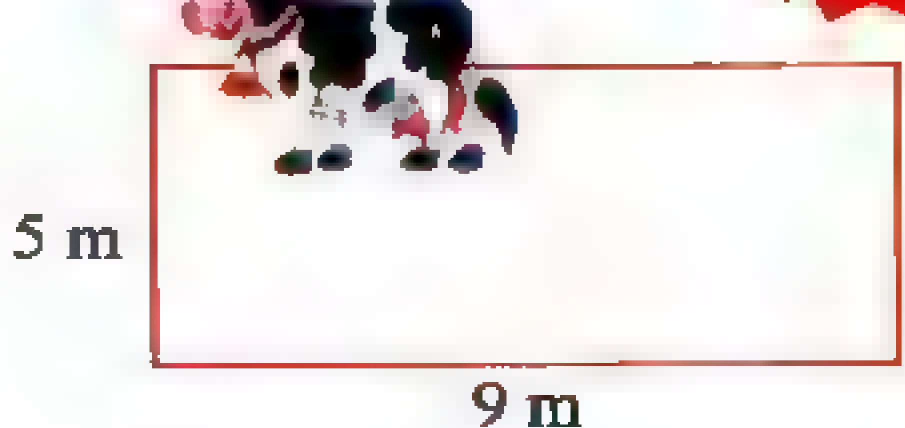


The perimeter = ... + ... + ... + ...

= ...... m

The area = ... × ......

= ...... square meter



5 m

9 m



Self - check 2 Chapters 1,2,3,4,5

1 Complete as in (a) :

a) (5 + 2) × 10 = ... (7 , 70 , 700)

b) 3 m = ... cm (30 , 300 , 3000)

c) The time [clock] is ..... (9 : 05 , 9 : 50 , 1 : 45)

d) The value of (2) in 72 569 is ...... (2 , 20 , 2000)

e) 49 ÷ 7 = ... (7 , 9 , 42)

2 Find the difference between the area of the following :

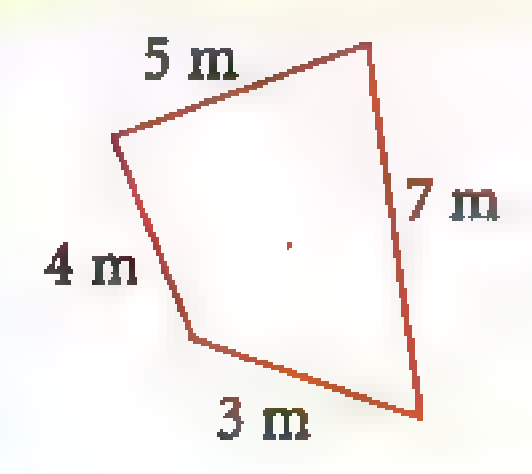
Fig 1: 7 m, 4 m

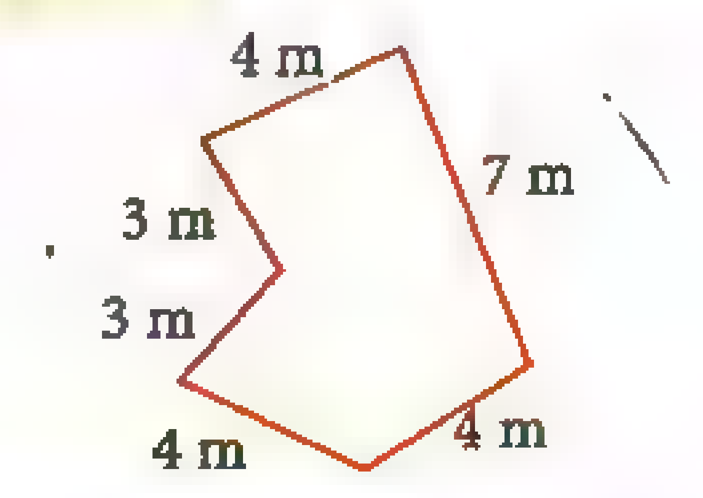
Fig 2: 4 m, 4 m

The area = ... square meter The area = ... square meter

The difference between the area = ... - ..... = ... square meter

3 Find the perimeter of the following :





The perimeter = ... m The perimeter = ... m

For more exercises follow the : Bakkar Self- check page (210)



Strategies and applications

Key Vocabulary

Factorization	التحليل
Automatic addition facts	حقائق الجمع التلقائية
Bows	أقواس
Capacity	السعة
Comparison	مقارنة
Data	البيانات
Hundreds	خانة المئات
Liter	لتر
Mathematical Facts	الحقائق الرياضية
Multiplication facts	حقائق الضرب
Number	رقم
The sum	ناتج الجمع

Difference	ناتج الطرح
Realization	إدراك
Regroup	إعادة التجميع
Reversed operation	عمليات عكسية
Subtrahend	المطروح منه
Addition	الجمع
Tables	الجداول
Ten thousands place	خانة عشرات الألاف
Tens place	خانة العشرات
Hundred thousands	خانة مئات الألاف
Ones place	خانة الأحاد
The value	القيمة
Thousand place	خانة الألاف

Content

Bakkar Self-Check On each Chapter

Bakkar Self-Check On each lesson

Exercise inspired by Math Format

Exercise inspired by Discover Book



Lesson (51 , 52 , 53)

Multiplying by 9 strategies

Activity 1 Complete the following as EX :

EX 10 = 1 × 10	20 = ×	30 = ×10
40 = 4 ×	50 = × 10	60 = 6 ×
70 = ×10	80 = ×	90 = ×

Activity 2 Complete the following as in (a) :

(a)	(b)	(c)
2 × 3 = 6	5 × 3 =	6 × 6 =
2 × 30 = 60	5 × 30 =	6 × 60 =
2 × 300 = 600	5 × 300 =	6 × 600 =
2 × 3000 = 6000	5 × 3000 =	6 × 6000 =

Activity 3 Complete the multiplying by the multiples of 10 as in (a) :

(a) 3 × 40 = 3 × 4 × 10 = (3 × 4) × 10 = 12 × 10 = 120

(b) 8 × 50 = 8 × × 10 = (5 ×) × = × 10 =

(c) 6 × 20 = 6 × 2 × = (6 ×) × 10 = × 10 =

(d) 7 × 30 = 7 × × 10 = (7 ×) × = × 10 =

(e) 5 × 40 = 5 × 4 × = (5 ×) × 10 = × 10 =

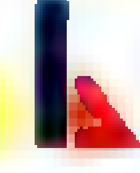
(f) 9 × 60 = 9 × 6 × = (9 ×) × 10 = × 10 =

Bakkar Series



BAKKAR

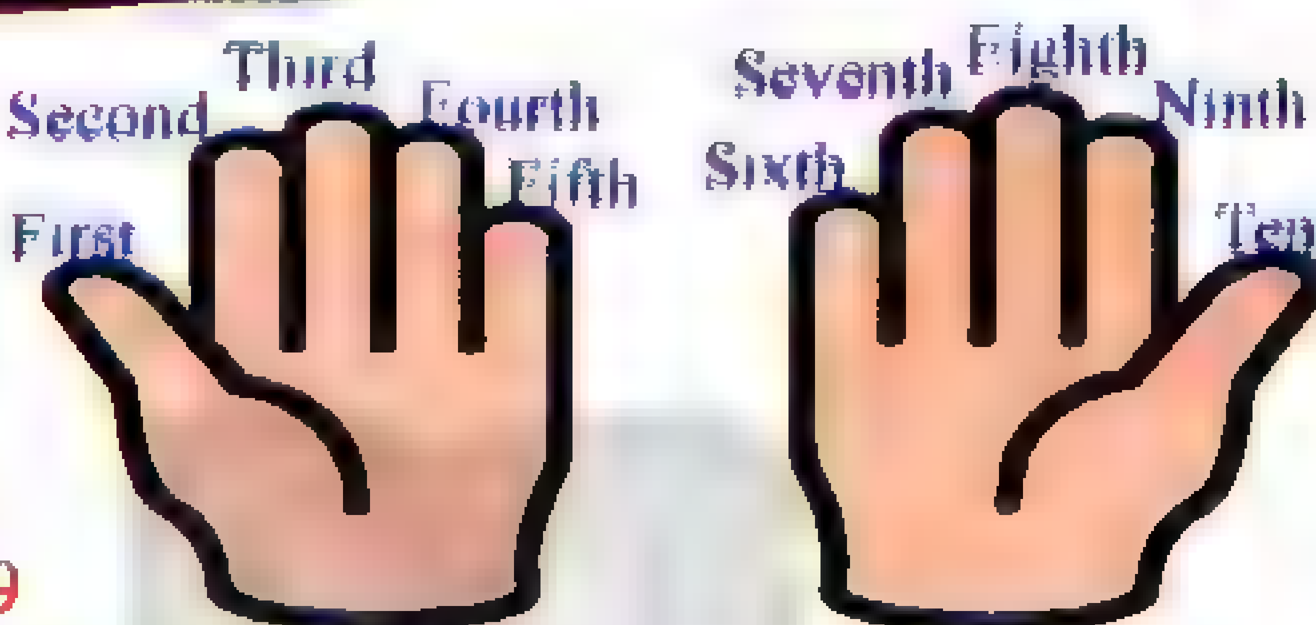
Strategies and applications



Multiplying by 9 strategies

First : Finger trick strategy

This method is valid only with the number 9



-The first factor is 9

-The order of the flexor finger is the second factor

The product :

-The fingers at the left of the flexor finger is the tens .

-The fingers at the right of the flexor finger is the ons .

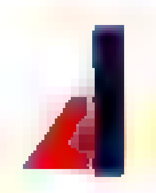
Tens 1 Ones 8

$9 \times 2 = 18$

The shape	First factor	Second factor	The result
9	9	1	9 × 1 = 9
1 8	9	2	9 × 2 = 18
2 7	9	3	9 × 3 = 27
3 6	9	4	9 × 4 = 36
4 5	9	5	9 × 5 = 45

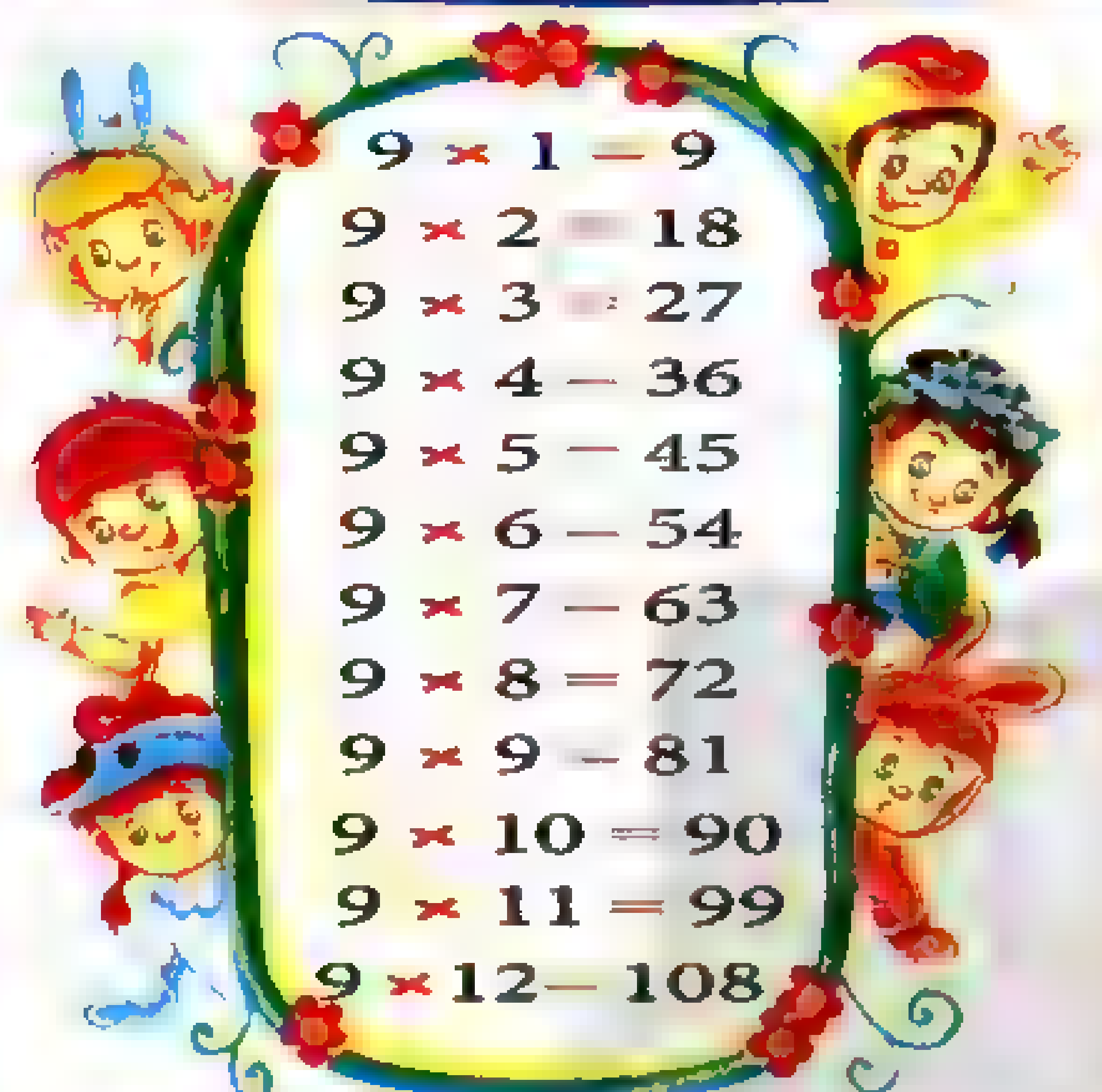
The shape	First factor	Second factor	The result
5 4	9	6	9 × 6 = 54
6 3	9	7	9 × 7 = 63
7 2	9	8	9 × 8 = 72
8 1	9	9	9 × 9 = 81
9 0	9	10	9 × 10 = 90





Chapter 6

Second: Using multiplication facts by 9



Third: using number chart

111	112	113	114	115	116	117	118	119	120
101	102	103	104	105	106	107	108	109	110
91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Fourth: using multiplication facts by 10

9	×	1	= (	10	×	1	) −	1	=	9
9	×	2	= (	10	×	2	) −	2	=	18
9	×	3	= (	10	×	3	) −	3	=	27
9	×	4	= (	10	×	4	) −	4	=	
9	×	5	= (	10	×	5	) −	5	=	
9	×	6	= (	10	×	6	) −		=	
9	×	7	= (	10	×		) −		=	
9	×	8	= (	10	×		) −		=	
9	×	9	= (	10	×		) −		=	

$9 \times \square = (10 \times \square) - \square$

$9 \times 0 = (10 \times 0) - 0 = 0$

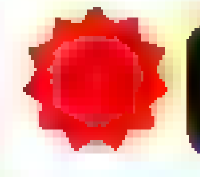
$9 \times 10 = (10 \times 10) - 10 = 90$

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Strategies and applications

Exercise 1 Complete :

9 × 5 = ...	9 × 0 = ...	9 × 3 = ...	9 × 1 = ...	9 × 4 = ...
9 × 6 = ...	9 × 2 = ...	9 × 7 = ...	9 × 8 = ...	9 × 9 = ...



Activities from Math Journal

Activity 4 Complete the multiplying × multiples of 10 as (a) :

(a) 8 × 40 = 8 × 4 × 10 = (8 × 4) × 10 = 32 × 10 = 320

(b) 3 × 90 = 3 × ... × 10 = (3 × ...) × ... = ... × 10 = ...

(c) 4 × 80 = 4 × 8 × ... = (4 × ...) × 10 = ... × 10 = ...

(d) 9 × 20 = 9 × ... × 10 = (9 × ...) × ... = ... × 10 = ...

(e) 6 × 30 = 6 × 3 × ... = (6 × ...) × 10 = ... × 10 = ...

(f) 8 × 50 = 8 × 5 × ... = (8 × ...) × 10 = ... × 10 = ...

(g) 7 × 30 = 7 × 3 × ... = (7 × ...) × 10 = ... × 10 = ...

(h) 6 × 70 = 6 × 7 × ... = (6 × ...) × 10 = ... × 10 = ...

(i) 5 × 40 = 5 × 4 × ... = (5 × ...) × 10 = ... × 10 = ...

Self - check on lesson (51 , 52 , 53)

1 Complete the following using the strategies of multiplication :

Math Journal

First set	Second set	Third set
(a) 7 × 2 =	(a) 3 × 9 =	(a) 10 + 1 =
(b) 6 × 0 =	(b) 4 × 3 =	(b) 2 × 3 =
(c) 3 + 9 =	(c) 6 + 5 =	(c) 0 + 10 =
(d) 1 × 7 =	(d) 9 + 9 =	(d) 8 × 0 =
(e) 1 + 9 =	(e) 4 × 2 =	(e) 6 + 5 =
(f) 2 × 4 =	(f) 6 + 6 =	(f) 3 + 10 =
(g) 9 × 6 =	(g) 3 + 3 =	(g) 2 × 6 =
(h) 8 + 9 =	(h) 2 × 10 =	(h) 7 + 3 =
(i) 10 × 8 =	(i) 9 + 10 =	(i) 0 + 4 =
(j) 2 + 9 =	(j) 6 + 1 =	(j) 8 × 8 =
(k) 4 × 8 =	(k) 5 × 10 =	(k) 5 + 5 =
(l) 1 × 1 =	(l) 9 × 6 =	(l) 9 × 0 =
(m) 3 × 3 =	(m) 5 × 7 =	(m) 6 + 2 =
(n) 6 × 1 =	(n) 0 × 10 =	(n) 1 × 2 =
(o) 10 × 0 =	(o) 9 × 10 =	(o) 4 + 4 =

BAKKAR

Strategies and applications

2 Answer the following :

(a) Gerges saves 9 pounds every month .
What does he save in 8 months ?

The solution : What Gerges save = ... × ....
= .... pounds

(b) It is known that each horse has 4 legs.
How many legs are there in 9 horses?

The solution : Number of legs = ... × ....
= .... legs .

(c) With Mona 35 pounds, she bought 3 books for 9 pounds each.
How much is left with Mona ?

The solution : The price of books = ... × .... = LE ....
The left money = 35 - . . . . = LE ....

3 Join the equal cards :

60 + 3	9 × 9	65 - 2
40 + 5	9 × 8	82 - 1
80 + 1	9 × 5	72
9 × 9 - 9	9 × 7	50 - 5

Lesson (54 , 55)

Strategies for solving story Problems

Activity 1 Write the time according to the hands :


5 : 50


:


:


:


:


:

Exercise 1 Jamila asked her teacher : Is the number 999 greater than the number 1000 ?

The teacher asked : Are the number of digits the two numbers equal ?
Jamila replied : The number of digits of the number 1000 is more
So the number 1000 is greater than the number 999

Exercise 2 The teacher asked : Is the number 1312 greater than the number 23406 ?

The number of digits of the number 1312 is ....
The number of digits of the number 23406 is ....
So the number .... is greater than the number ....

Exercise 3 Which number is greater : 451234 or 66076?

The number of digits of the number 451234 is ....
The number of digits of the number 66076 is ....
So the number .... is greater than the number ....



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Strategies and applications

Exercise 4 The number that has 5 thousands , 7 hundreds , 6 tens , 4 ones . what is this number ?

The number : ...... + ... + ... + ... = ...

Exercise 5 The number that has 12 hundreds , 15 tens , 6 ones . What is this number ?

The number : ... + ... + ... = ...

Exercise 6 Write in the standard form : 50 000 + 6 000 + 300 + 40 + 2

The number : ....

Exercise 7 Write in the expanded form 3509

The expanded form : ... + ... + ... + ... = ...

Exercise 8 Arrange the following numbers in an ascending order : 5021 , 5201 , 5102 , 5210

The order : ... , ... , ... , ...

First strategy **The expanded form :**

Exercise 9 Add as Ex :

a) $234 + 352 = (200 + 30 + 4) + (300 + 50 + 2) = 586$

b) 101 + 184 = (... + ... + ...) + (... + ... + ...) = ...

c) 483 + 201 = (... + ... + ...) + (... + ... + ...) = ...

d) 823 + 262 = (... + ... + ...) + (... + ... + ...) = ...

e) 657 + 233 = (... + ... + ...) + (... + ... + ...) = ...

Chapter 6

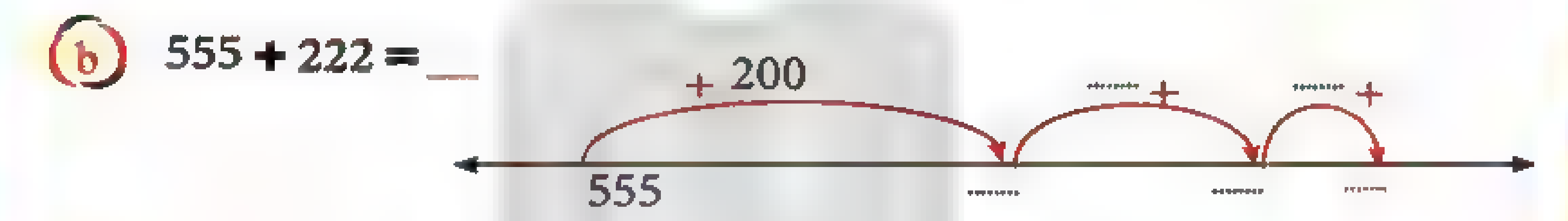
Second strategy Number line :

Exercise 10 Add using the numbers line as in (a) :

(a) 265 + 331 = 596



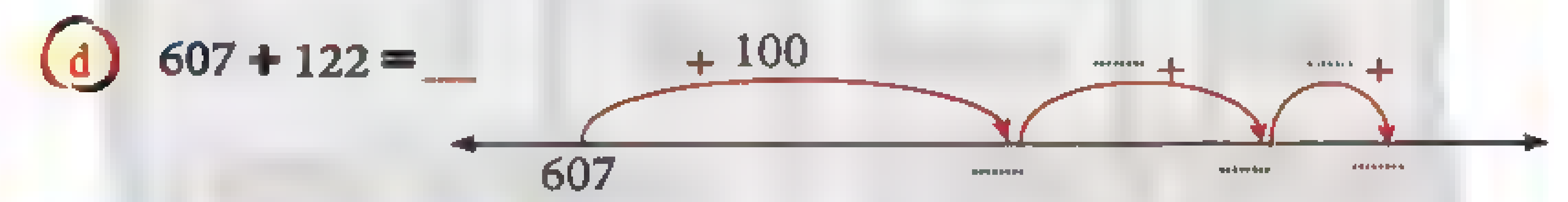
(b) 555 + 222 = ...



(c) 154 + 324 = ...



(d) 607 + 122 = ...



Third strategy Place value cards :

Exercise 11 Add using the place value cards as EX :

444 + 235 = ...

Hundreds	Tens	Ones
4 2	4 3	4 5
6	7	9

726 + 122 = ...

Hundreds	Tens	Ones
7 1	2 2	6 2
......	......	......

381 + 427 = ...

Hundreds	Tens	Ones
3 4	8 2	1 7
......	......	......

Self - check on lesson (54 , 55)

1 Write in the standard form :

a) Two hundred thousand, four hundred and seventy : ....

b) One hundred sixty thousand and seventy four : ....

c) Ninety thousand and eleven : ....

2 Complete the following :

a) 700 thousand and 350 = ... (In digits)

b) The value of 3 in 342 901 is ....

c) The place value of 7 in 170 423 is ....

d) The greatest number formed from 6 , 7 , 1 , 3 , 5 , 4 is : ....

e) If the value of 6 in a number is 600 000 then its place value in this number is ....

3 Put (< , = , >) :

a) 307 005 ( ) 370 005

b) 340 026 ( ) 340 206

c) 717 117 (......) 177 117

d) 440 404 ( ) 404 440

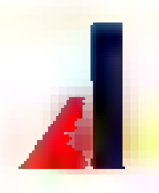
4 Arrange the following numbers :

a) 542 286 , 542 197 , 542 904 , 542 409

Ascendingly : .... , ... , ... , ...

b) 540 678 , 140 678 , 640 678 , 440 678

Descendingly : .... , ... , ... , ...



Chapter 6



5 Use the following strategy to add the following as in (a) :

The problem	The solution	The result
(a) 97 + 184	97 —+100→ 197 —+80→ 277 —+4→ 281	281
(b) 483 + 211	483 —+200→ … —+ …→ … —+ …→ …	
(c) 823 + 262	823 —+ ……→ … —+ …→ … —+ …→ …	
(d) 677 + 233	677 —+ ……→ … —+ …→ … —+ …→ …	
(e) 865 + 337	865 —+ ……→ … —+ …→ … —+ …→ …	
(f) 234 + 352	234 —+ ……→ … —+ …→ … —+ …→ …	
(g) 742 + 239	742 —+ ……→ … —+ …→ … —+ …→ …	
(h) 809 + 135	809 —+ ……→ … —+ …→ … —+ …→ …	



Lesson (56 , 57 , 58)

Strategies application On addition and subtraction

First Estimation using place value strategy (left digit)

Activity 1 Add then estimate the sum :

First grade 172
Second grade 358

530 Pupils

The estimation = 500 Pupils

Grade	Number
P1	172
P2	358
P3	429
P4	487

Second Estimation using round to the nearest 100 :

Activity 2 estimate using round to 100 to find the sum :

Euphrates 2800
Mississippi 3775

6575 Km

Round to the nearest 100 = 6600 Km

River	Length in Km
Nile	6650
Amazon	6400
Mississippi	3775
Euphrates	2800

Third Expand form strategy :

Activity 3 Find the result :

(a) 2124 + 6745 = (2000 + 100 + 20 + 4) + (6000 + 700 + 40 + 5)

= (2000 + 6000) + (100 + 700) + (20 + 40) + (4 + 5)

= 8000 + ... + ... + 9 = 8869

(b) 6745 – 2124 = (6000 + 700 + 40 + 5) – (2000 + 100 + 20 + 4)

= (6000 – 2000) + (700 – 100) + (40 – 20) + (5 – 4)

= .... + ... + ... + 1 = 4621

Chapter 6



Using drawing the value shapes :

Activity 4 Find the result of 572 – 350 :

Hundred	Tens	Ones

= 222



Place value cards strategy :

Activity 5 Find the result :

	Thousands	Hundreds	Tens	Ones
	2	5	3	9
+	6	7	7	7
	9	3	1	6

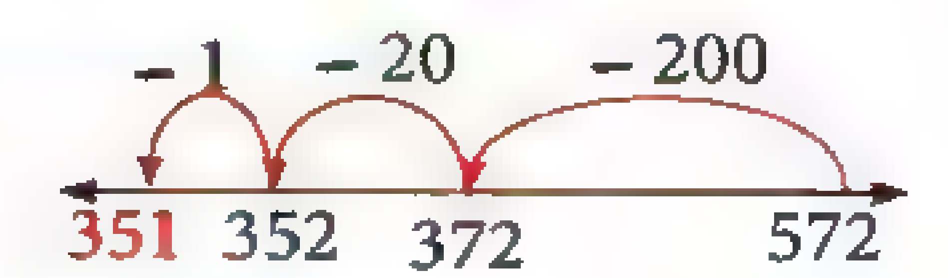
	Thousands	Hundreds	Tens	Ones
	3	6	0	0
–	1	5	7	6
	2	0	2	4

Sixth

Line plots strategy :

Activity 6 Find the result of 572 – 221 :

Subtract from the big number
hundred then tens then ones





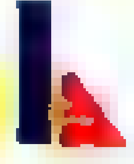
Relation between addition and subtractions :

Activity 7 Find the result of 780 – 450 :

780 – 450 = 330 because 330 + 450 = 780



Strategies and applications

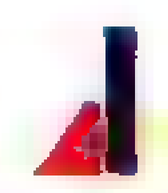




Exercise: Find the result :

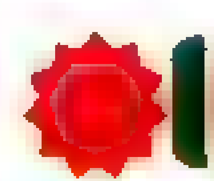
Subtraction		Relation between addition and subtraction
Using the number line	Using place value cards	
754 – 352 –2 –50 –300 754	Hundred | Tens | Ones	754 – 352 = ... 352 + ... = 754
925 – 615 –5 –10 –600 925	Hundred | Tens | Ones	925 – 615 = ... 615 + ... = 925
1759 – 1225 –5 –20 –200 –1000 1759	Thousands | Hundred | Tens | Ones	1759 – 1255 = ... 1255 + ... = 1759
5548 – 3315 –5 –10 –300 –3000 5548	Thousands | Hundred | Tens | Ones	5548 – 3315 = ... 3315 + ... = 5548
6839 – 3416 –6 –10 –400 –3000 6839	Thousands | Hundred | Tens | Ones	6839 – 3416 = ... 3416 + ... = 6839





Chapter 6





Activities from Math Journal

Activity 1 Mr. Mahmoud educates chickens , in a year his chickens have laid 5350 eggs. Last year his chickens laid 2120 eggs. How many eggs did his chickens lay in the two years ago ?

The solution :

Activity 2 Mr. Mahmoud also raises sheep. One day he took 235 sheep out to graze on a hill. Later , his neighbour brought his sheeps to the hill to graze beside hem . Now there are 680 sheep on the hill . How many sheep did the neighbour bring to the hill ?

The solution :

Activity 3 The library can hold 2475 books , but 525 books are out on loan and 137 books are missing. How many books are there in the library right now ?

The solution :

Activity 4 Three boxes filled with books were just delivered to the library. If each box is filled with 215 books. How many books were delivered ?

The solution :

Self - check on lesson (56 , 57 , 58)

1 Add (Using the same strategy) :

a) 5087 + 6076

b) 3289 + 2787

c) 7878 + 8787

d) 5555 + 6666

e) 16284 + 20543

f) 34396 + 44444

g) 12649 + 38700

h) 14758 + 15278

i) 9201 + 5499

j) 9832 + 7873

k) 6005 + 3299

l) 94270 + 4078

2 Subtract (Using the same strategy) :

a) 5975 − 2403

b) 6845 − 1835

c) 9895 − 5775

d) 5555 − 3333

e) 9979 − 8909

f) 4321 − 3121

g) 8507 − 1505

h) 8459 − 4444

i) 7806 − 1805

j) 9650 − 7000

k) 4203 − 1203

l) 8096 − 8053



Chapter 6



Activities from Math Journal

3 The librarian takes some of the new books out of the boxes that have 1000 books . Now there are only 510 books in the boxes . How many books did the librarian take out of the boxes ?

The solution : ......

4 Amir`s family is saving to buy a new TV. The TV costs LE 4590 on sale. They have saved LE 2410 so far.
How much more money do they need before they can buy the TV ?

The solution : ......

5 Omar just moved to the city. He found an apartment to rent for LE 3340 per month. Electricity and gas will cost him LE 692 par month .
How much money will it cost him each month to live ?

The solution : ......

6 If Samar hand LE 5000 to spend each month , how much money does she have left after she pays LE 3500 for rent, electricity and gas ?

The solution : ......

Lesson (59 , 60)

Liquid volume (Capacity)
Units for measuring liquid volume

Activity 1 Important discussion:

Teacher : One of the types of tools used to measure height
Pupils : rulers
Teacher : One of the types of units of length measurement
Pupils : meters, cm, mm . Meter = 100 cm , cm = 10 mm

Teacher : One of the types of tools used to measure time
Pupils The hour with hands
Teacher : One of the types of units used to know the time
Pupils the hour - the minute . Hour = 60 minutes

Teacher : One of the types of tools used in measuring weight
Pupils Scales
Teacher : One of the types of units used to know weight or mass
Pupils kilogram - grams . The kilogram = 1000 grams

Teacher : Today we are introducing a new measure that we use in our lives which is capacity
How do you measure the amount of liquids that can be placed in a container?

Capacity Is a measure of the amount of liquid that can be placed in a container .Units of capacitance litres (l), millilitre (ml)

Activity 2 Things in our life with capacity per litre (L):


30 letre

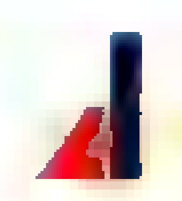
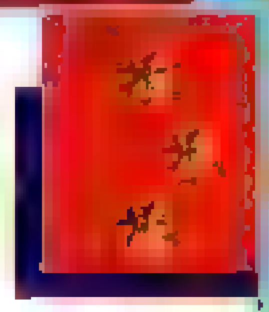

5 letre


2 letre



1 letre



Chapter 6

Activity 3 Things in our life its capacity are measured in millilitres (ml):



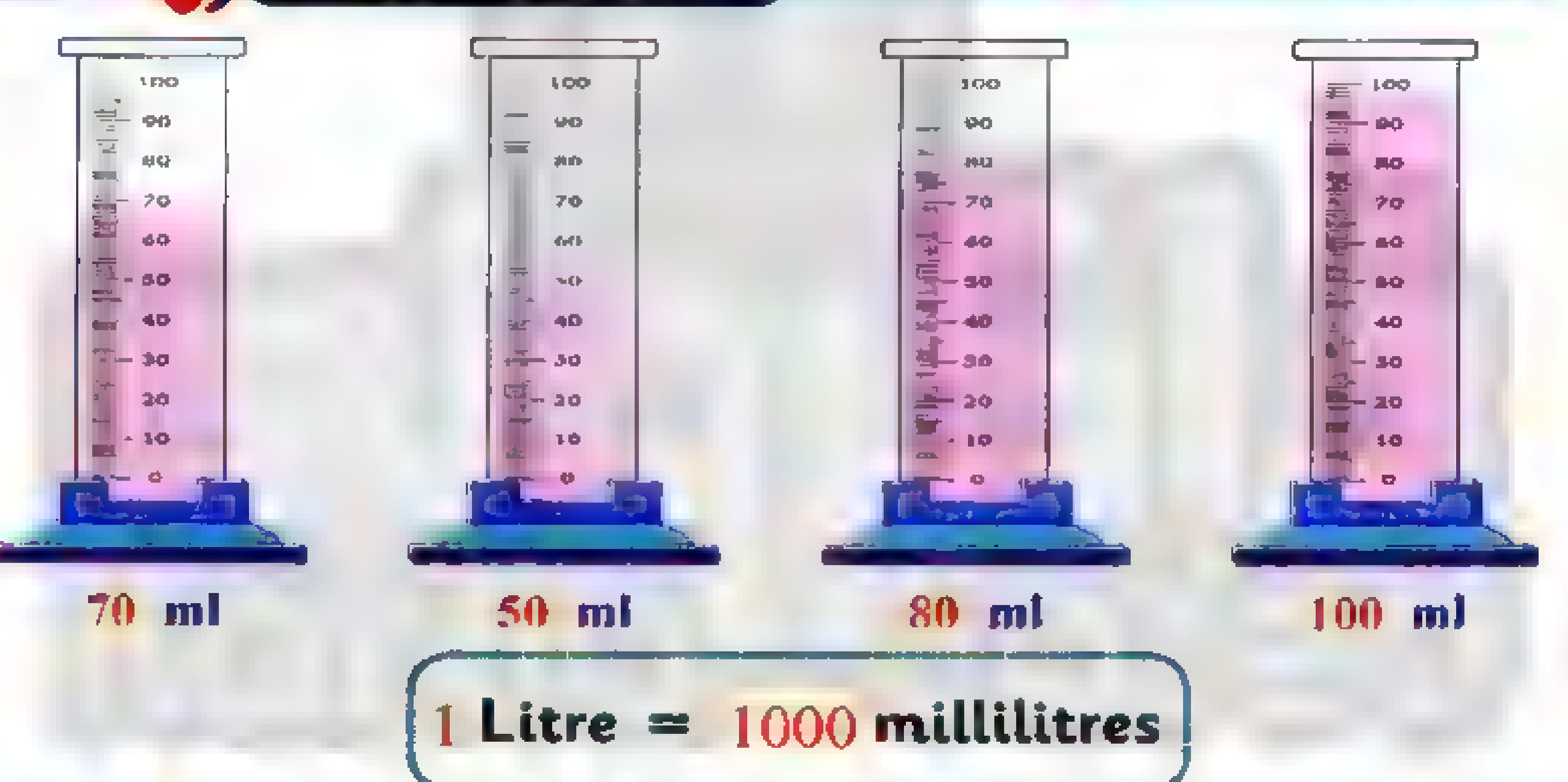
100 ml


250 ml


125 ml


5 ml

Activity 4 Measurement instruments in millilitres :



1 Litre = 1000 millilitres

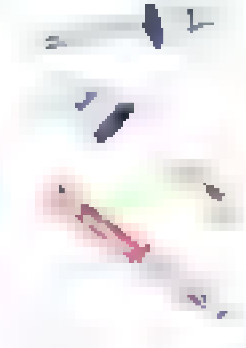


For each photo, choose the suitable unit of measure for the capacity of the following :


L , ml


L , ml


L , ml


L , ml

Self - check on lesson (59 , 60)

1 Choose the suitable unit of measurement :

(a) The weight of  (kg , km , L)

(b) The perimeter of (gm , ml , cm)

(c) The capacity of (L , kg , km)

(d) The distance between two cities (kg , km , ml)

(e) From the time units (minute , cm , L)

2 Arrange the following volumes :

(a) 7 L , 20 L , 10 L , 5 L

Ascendingly : .... , ... , ... , ...

(b) 10 ml , 15 ml , 17 ml , 30 ml

Descendingly : .... , ... , ... , ...



(c)





A B C D

Ascendingly : C , ... , ... , ...

3 Choose the suitable measurement unit:



L , ml   L , ml   L , ml







L , ml   L , ml   L , ml

4 Choose the suitable measurement unit:

a) The amount of water that a person drinks in one day (10 L , 2 L , 30 ml)

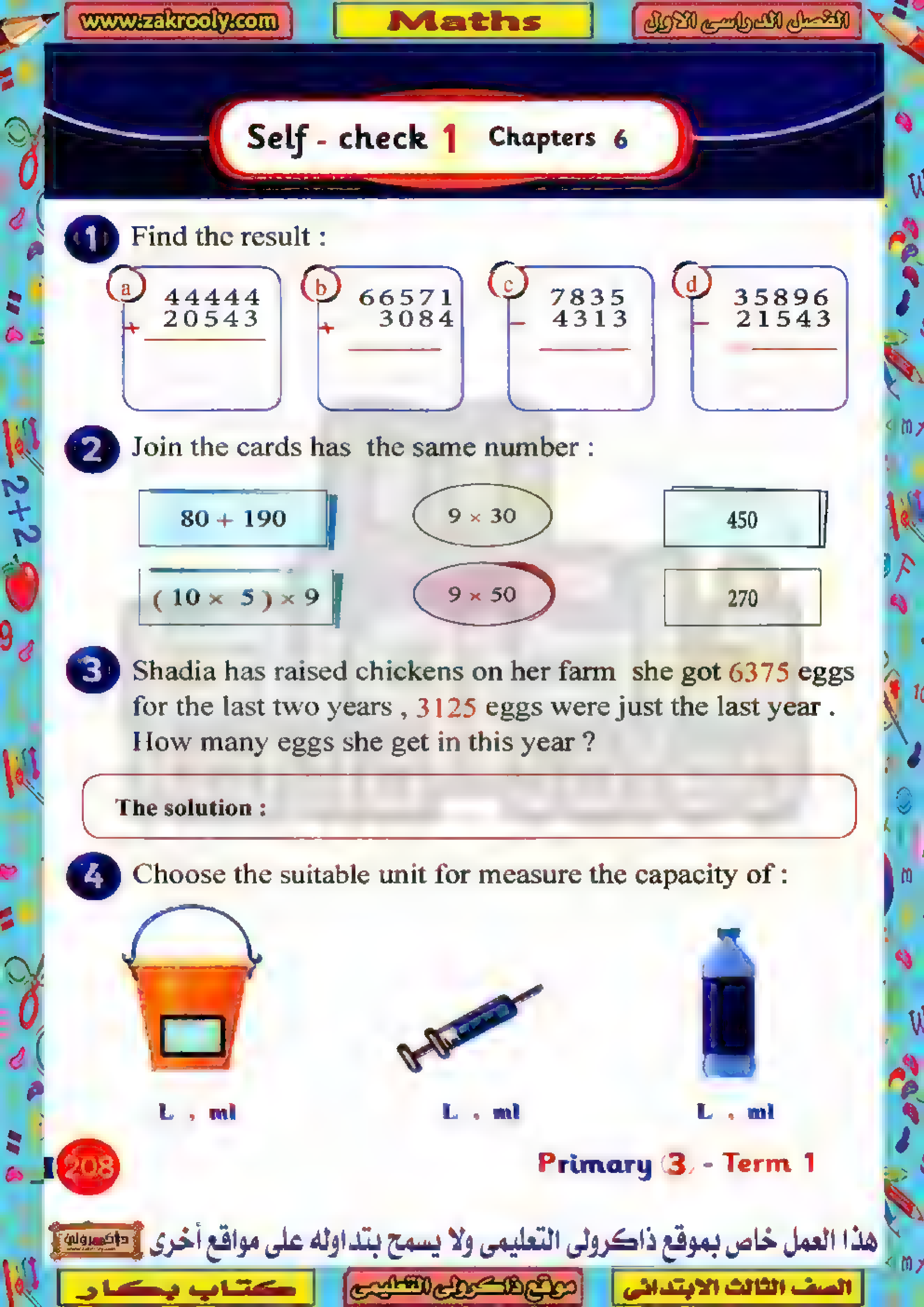
b) Capacity of water tank on the building (500 L , 7 L , 300 ml)

c) Tank of a car with capacity (30 ml , 40 L , 500 ml)

d) Small mineral water bottle capacity (10 L , 1 L , half ml)

e) The capacity of the coffee cup can be equal (100 L , 1 L , 100 ml)

f) The capacity of a cup of milk can be equal (200 L , 200 ml , 10 ml)



Self - check 1 Chapters 6

1 Find the result :

a)
```
  44444
+ 20543
-------
```

b)
```
  66571
+  3084
-------
```

c)
```
  7835
- 4313
------
```

d)
```
  35896
- 21543
-------
```

2 Join the cards has the same number :

80 + 190	9 × 30	450
(10 × 5) × 9	9 × 50	270

3 Shadia has raised chickens on her farm she got 6375 eggs for the last two years , 3125 eggs were just the last year . How many eggs she get in this year ?

The solution :

4 Choose the suitable unit for measure the capacity of :

L , ml   L , ml   L , ml

Self - check 2 Chapters 1,2,3,4,5,6

1 Find the result :

(a)
$$\begin{array}{r} 56217 \\ +\ 20543 \\ \hline \end{array}$$

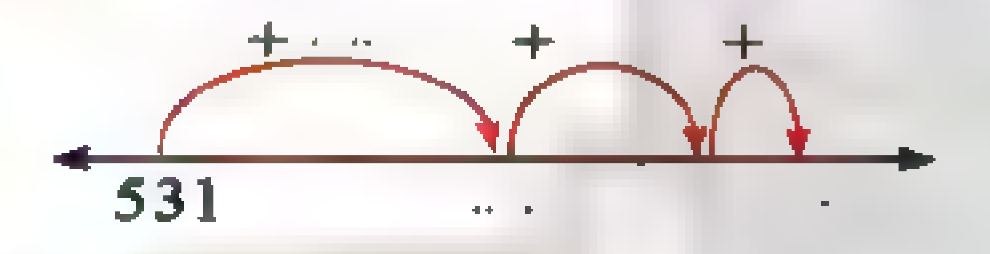
(b)
$$\begin{array}{r} 34396 \\ +\ 34396 \\ \hline \end{array}$$

(c)
$$\begin{array}{r} 98130 \\ -\ 3121 \\ \hline \end{array}$$

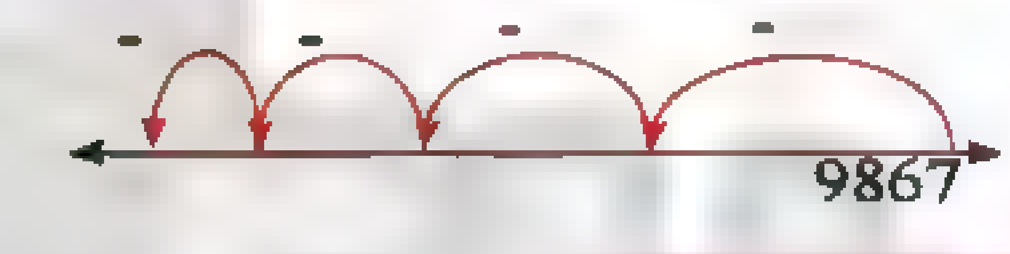
(d)
$$\begin{array}{r} 6034 \\ -\ 1262 \\ \hline \end{array}$$

2 Using the number line strategy to find the result :

(a) 531+ 345



(b) 9867 – 3452



3 Complete :

(a) 7 × 60 = 7 × 6 × ...... = ...

(b) 916543 ◯ 91600

(c) The smallest number formed from numbers 5 , 4 , 7 , 9 , 1 , 6 is ......

(d) The amount of milk a child drinks in one day is measured with ......

(e) A building water tank capacity of 500 ......

4 It is well known that each car has 4 wheels .
How many wheels are in 30 cars ?

The solution :

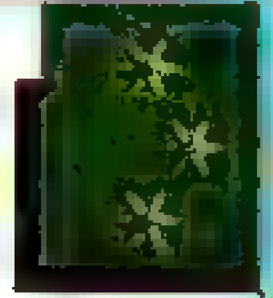
For more exercises follow the Bakkar Self- check page (210)



Skills part

Bakkar assessments on the curriculum





Self - check



Bakkar Self - check 1

1 Complete the following :

(a) 0 × 7 = ... (b) 40 ÷ 5 = ... (c) 8 × 6 = ...

(d) 24 ÷ 3 = ... (e) 6 × 1 = ... (f) 18 ÷ 2 = ...

(g) 32 ÷ ..... = 4 (h) ..... ÷ 7 = 7 (i) 9 × ..... = 72

2 Find the area of the following figure :

3 m

5 m

The area = ...

The area =

3 Choose the correct answer :

(a) The greatest number formed from the digits 1, 5, 2, 9 is .... (1 592, 9 521, 1 259)

(b) From the factors of 15 is 1, ..., 5 (3, 10, 2)

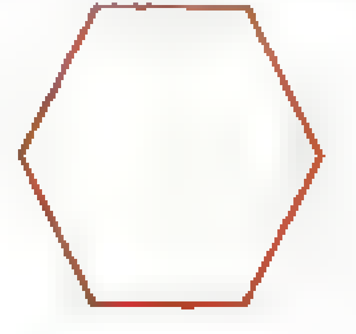
(c) 8 × 13 = (8 × 8) + (8 × ....) (10, 5, 3)

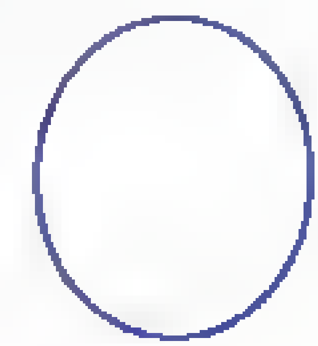
(d) From the units for measuring time is ... (gm, minute, cm)

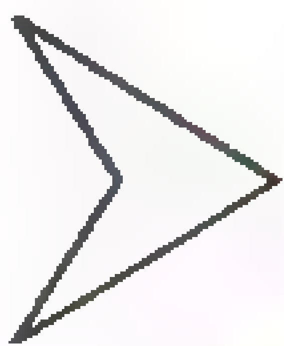
(e) 3 meter = ... cm (30, 3, 300)

4 Put (√) inside each polygons :









BAKKAR

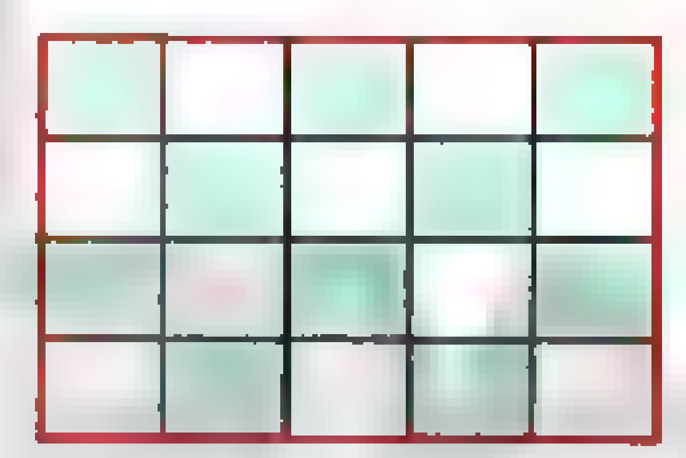
Skill part

Bakkar Self check 2

1 Complete the following :

a) 63 ÷ 9 = ...
b) 4 × 6 = ...
c) 25 ÷ 5 = ...
d) 9 × 3 = ...
e) 6 ÷ ...... = 1
f) 0 × 2 = ...
g) 7 ÷ 1 = ...
h) 5 × ...... = 20
i) ...... ÷ 8 = 1

2 Answer the following :



The perimeter = ... + ... + ... + ...
= ...... units

The area = ... × ......
= ...... square units

3 Choose the correct answer :

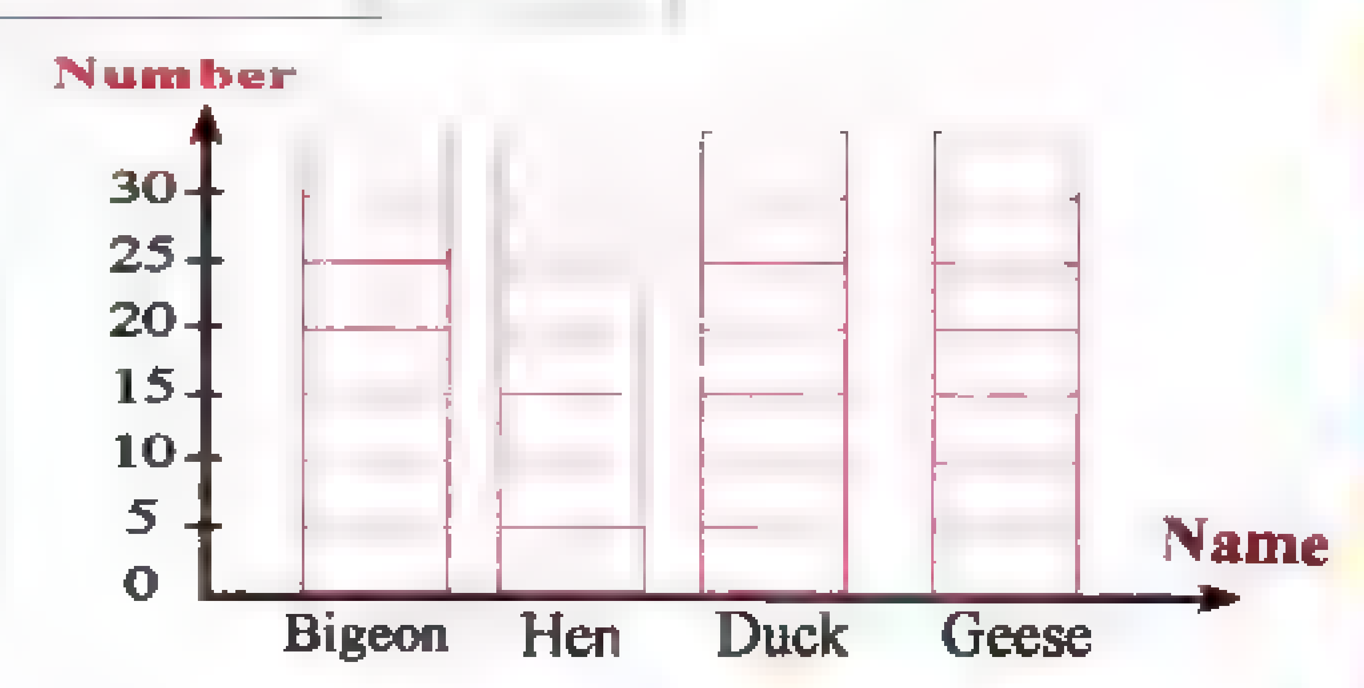
a) The place value of 9 in 29531 is ...... (ones , hundred , thousand)

b) 37 thousands and five hundred= ...... (7350 , 3750 , 37500)

c) / //// ////// ...... (////// , //////// , //////////)

4 From the table complete the bar graph :

Name	Number	
Bigeon	卌 卌 卌 卌 卌	
Hen	卌 卌 卌	
Duck	卌	
Geese	卌 卌	





Self - check



1 **Complete the following :**

(a) 4 × 7 = (b) 36 ÷ 9 = (c) 7 × 1 =

(d) 27 ÷ 3 = (e) 6 × 6 = (f) 48 ÷ 8 =

(g) 9 × ... = 63 (h) 45 ÷ ... = 5 (i) ... × 5 = 35

2 **A farmer builds a fence around his garden. If the length of the garden is 8 meters And its width is 3 meters .**
How long is the fence that needs to be bought?

The solution : ....

3 **Choose the correct answer :**

(a) Steel nail thickness measure with .... (mm , cm , m)

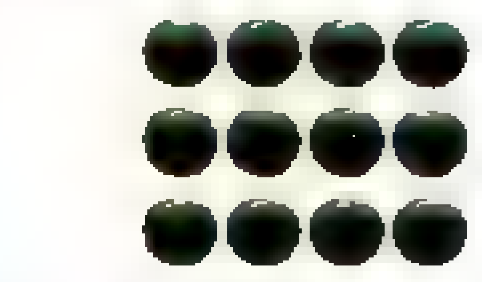
(b) The place value of 4 in 21540 is ... (tens , hundred , thousand)

(c) 1500 ...... 1050 (> , = , <)

(d) The smallest number can be formed from 3,4,9,5,6 is ...... (34569 , 96543 , 9)

(e) .... is multiples of 5 . (15 , 13 , 3)

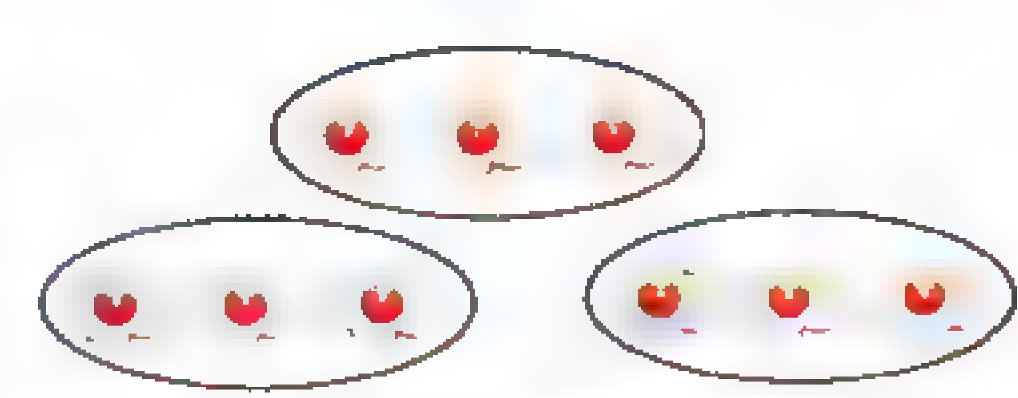
4 **Complete the following :**



Number of rows ....

Addition equation ....

The multiplication ... × ... = ...

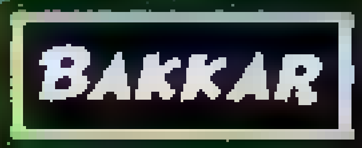


Number of sets ....

Addition equation ....

The multiplication ... × ... = ..





Skill part

Bakkar Self - check 4

1 Complete the following :

a) 64 ÷ 8 = ...
b) 30 × 7 = ...
c) 42 ÷ 6 = ...
d) 0 × 3 = ...
e) 8 ÷ 8 = ...
f) 9 × 2 = ...
g) 36 ÷ ...... = 4
h) ...... × 1 = 1
i) 15 ÷ ...... = 5

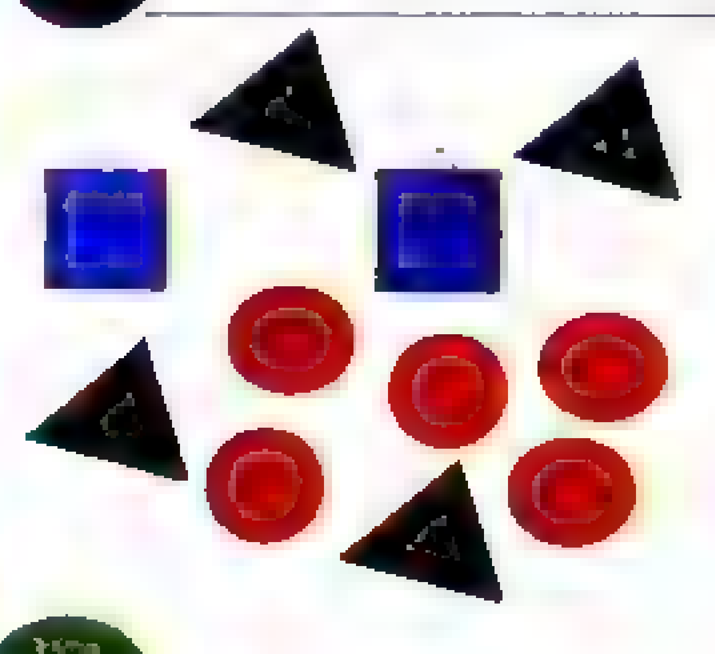
2 Find the result :

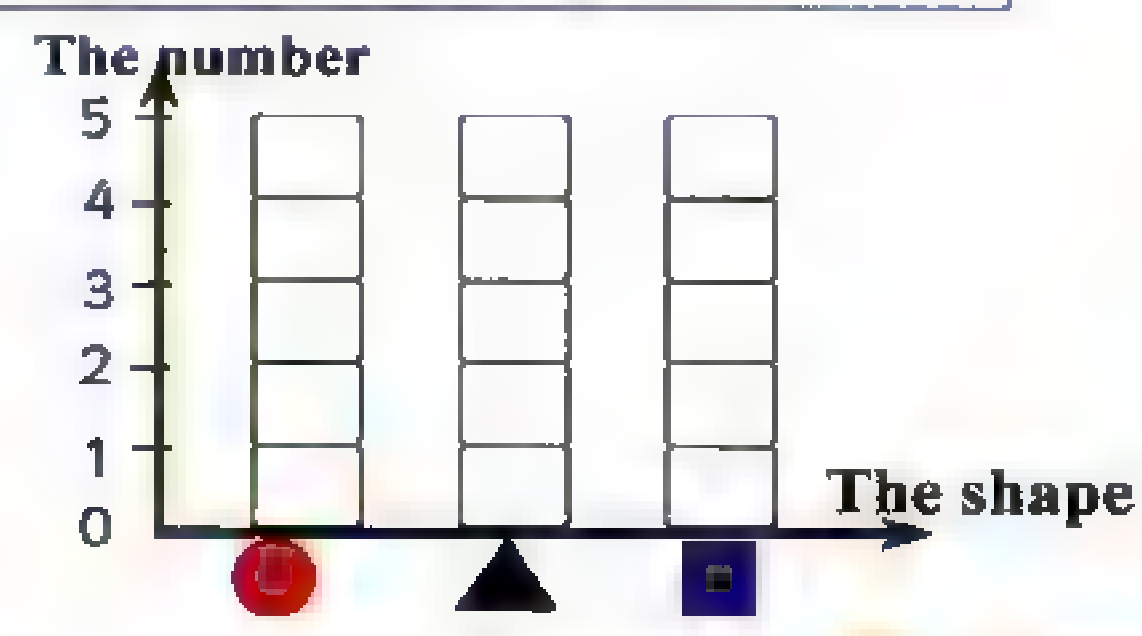
a) 7800 + 2222 = ...
b) 68745 + 10543 = ...
c) 7835 - 2403 = ...
d) 5975 - 1805 = ...

3 Choose the correct answer :

a) 90 mm = ... cm (9 , 90 , 900)
b) The greatest number formed from the digits 4,8, 2,6 is .... (2468 , 2846 , 8642)
c) 7 + 7 + 7 + 7 = ... × .... (4×7 , 7×7 , 5×7)
d) 10 , 40 , 70 , ... (10 , 100 , 30)
e) 1 hour = ... minutes (50 , 100 , 60)

4 From the shapes complete the bar graph :







Self - check

Bakkar Self - check 5

1 Complete the following :

a) 8 × 7 = ...
b) 49 ÷ 7 = ...
c) 0 × 1 = ...
d) 24 ÷ 8 = ...
e) 2 × 2 = ...
f) 11 ÷ 1 = ...
g) ...... × 9 = 45
h) 30 ÷ ...... = 3
i) ...... × 5 = 20

2 Find the area of the following :

3 m
3 m

The area = ...

The area = ...



3 Choose the correct answer :

a) From the factors of 9 is 1 , 3 and ...... (7 , 8 , 9)
b) Three hens has ...... legs . (4×3 , 3×3 , 2×3)
c) * - ** - - ...... (*** - - , ** - - - , *** - - -)
d) The time shown in [clock] is ...... (2 : 00 , 2 : 05 , 5 : 02)

4 Find the result :

a)
```
  16384
+ 23543
-------
........
```

b)
```
  7808
+ 4987
------
........
```

c)
```
  8507
- 1505
------
........
```

d)
```
  7506
- 1908
------
........
```



Skill part

Bakkar Self check 6

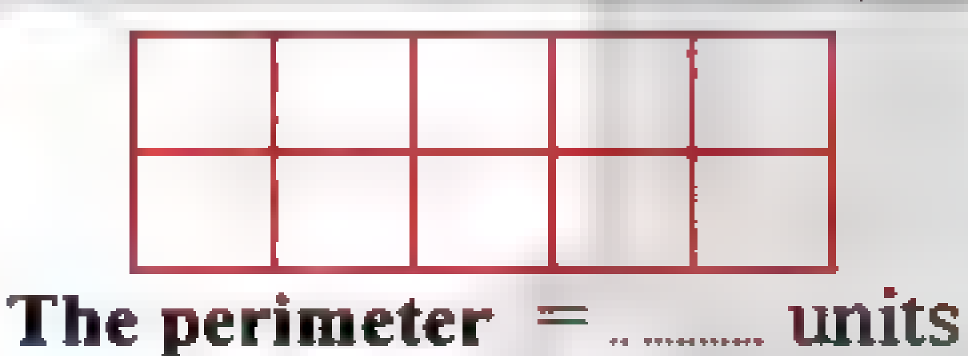
1 Complete the following :

(a) 10 × 3 = ... (b) 16 ÷ 2 = ... (c) 1 × 9 = ...

(d) 24 ÷ 4 = ... (e) 0 × 6 = ... (f) 18 ÷ 3 = ...

(g) .... × 8 = 72 (h) 21 ÷ .... = 7 (i) .... × 5 = 40

2 Find the perimeter of each figure :



The perimeter = ... units

The perimeter = ... m

3 Choose the correct answer :

(a) The length of (9 mm , 9 cm , 9 m)

(b) The place value of 2 in 26541 is .... (ones , tens , ten thousands)

(c) 7 × 9 = (7 × 5) + (7 × ....) (2 , 4 , 6)

4 From the table complete the pictograph :

Name	Number
Shark	𝍸 /
Puri	///
Tuna	// 𝍸
Mussa fish	////

Shark	
Puri	▭ ▭
Tuna	
Mussa fish	▭ ▭

Key : ▭ = 1 fish , ▭ = 2 fish



Self - check

Bakkar Self check 7

1 Complete the following :

a) 63 ÷ 9 = ...

b) 0 × 2 = ...

c) 48 ÷ 6 = ...

d) 11 × 3 = ...

e) 6 ÷ 6 = ...

f) 3 × 2 = ...

g) 32 ÷ ...... = 4

h) ...... × 7 = 14

i) ...... ÷ 5 = 5

2 A carpet is 5 meters long and 4 meters wide .
What is the area of this carpet ? ......

The solution :

3 Choose the correct answer :

a) The greatest number formed from the digits 1,5, 9,2 is .... (1592 , 9521 , 1259)

b) 9 × 40 = ... (360 , 306 , 2)

c) 75 thousand , and ten in digit is .... (1750 , 75010 , 75100)

d) 3 × 40 = 3 × 4 × .... (12 , 1 , 10)

e) From the units for measuring capacity ....(litre , cm , mm)

4 Complete the following :

Number of columns ....

Addition equation..........................

The multiplication ...... × ...... = ...

Number of rows ....

Addition equation..........................

The multiplication ...... × ...... = ...



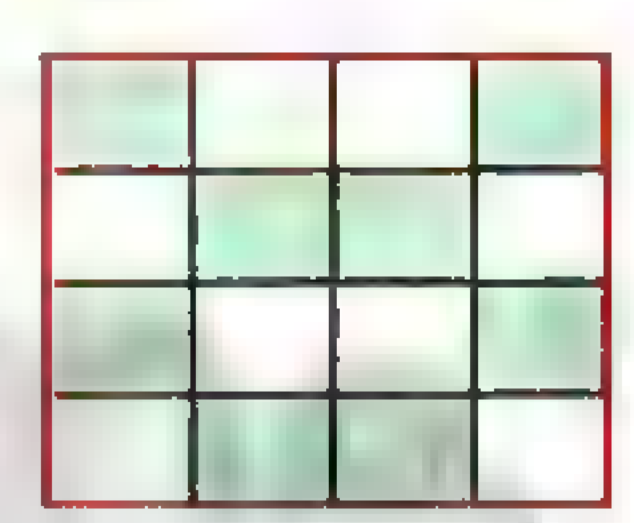


Bakkar Self - check 8

1 Complete the following :

(a) 40 ÷ 4 = ...
(b) 12 × 2 = ...
(c) 30 ÷ 6 = ...
(d) 1 × 3 = ...
(e) 6 ÷ 6 = ...
(f) 11 × 9 = ...
(g) ...... ÷ 8 = 3
(h) 0 × ...... = 0
(i) ...... ÷ 7 = 4

2 Complete :



The perimeter = ... + ... + ... + ...
= ...... units

The area = ... × ......
= ...... square units

3 Choose the correct answer :

(a) 6 m = ... cm (6 , 60 , 600)
(b) 5 + 5 + 5 + 5 + 5 + 5 = ... × ...... (5×5 , 5×7 , 5×6)
(c) 4512 (......) 45012 (>, = , <)
(d) Half an hour = ... minutes (60 , 100 , 30)
(e) From the factors of 14 is ...... (28 , 7 , 30)

4 Find the result :

	Thousand	Hundred	Tens	Ones
	2	2	1	9
+	6	7	7	7
	......	......	......	......

	Thousand	Hundred	Tens	Ones
	9	7	0	0
−	4	5	7	6
	......	......	......	......




Self - check

Bakkar Self - check 9

1 Complete the following :

(a) 0 × 7 = ... (b) 35 ÷ 5 = ... (c) 1 × 9 = ...

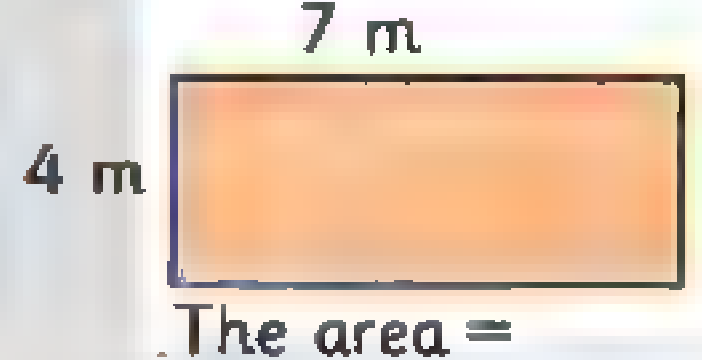
(d) 27 ÷ 9 = ... (e) 10 × 6 = ... (f) 18 ÷ 9 = ...

(g) 8 × ...... = 16 (h) ...... ÷ 3 = 11 (i) ...... × 5 = 5

2 Find the area :



The area = ...



The area = ...

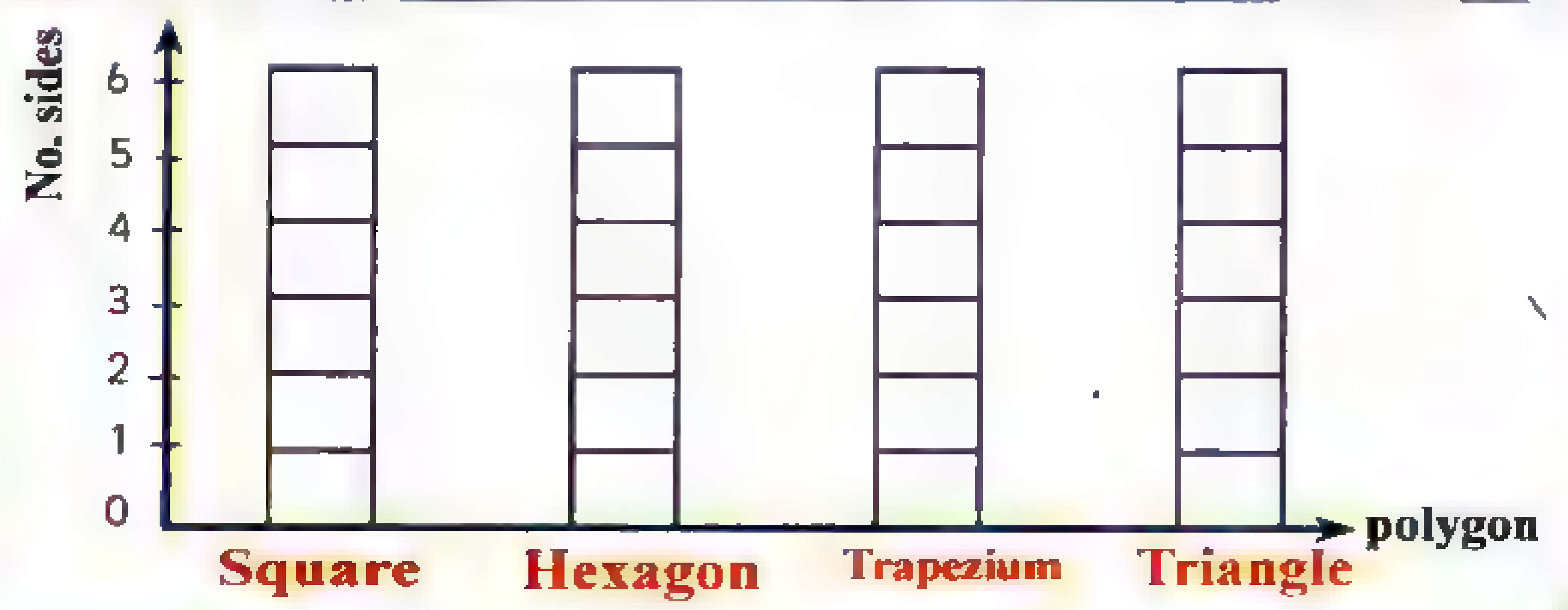
3 Choose the correct answer :

(a) The place value of 5 in 86513 is .... (ones , hundred , thousand)

(b) The height of the building in which I live is measured by .... (mm , cm , m)

(c) 1 Litre = ... ml (10 , 100 , 1000)

4 Colour the bar graph according to the number of sides of each polygon :





Skill part

Bakkar Self - check 10

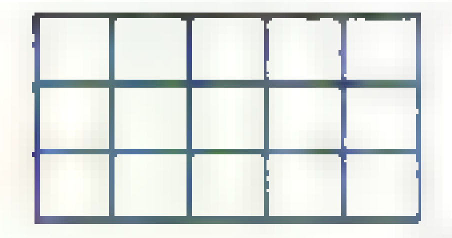
1 Complete the following :

a) 12 ÷ 6 = ... b) 10 × 5 = ... c) 36 ÷ 4 = ...

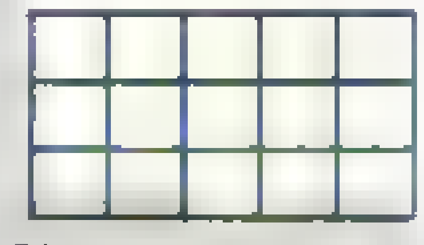
d) 24 ÷ 3 = ... e) 7 × 8 = ... f) 7 × 4 = ...

g) .... ÷ 1 = 12 h) 22 ÷ 2 = ... i) ..... × 0 = 0

2 Shade two rectangle with perimeter 8 units and with different area then find the area:



The area = ...



The area = ...

3 Choose the correct answer :

a) 99 thousands , nine hundred = ... (75100 , 7510 , 99900)

b) The greatest number formed from the digits 1 , 2 , 8 , 0 is .... (8210 , 2810 , 8210)

c) Number of days in 5 weeks = ... (5×5 , 5×7 , 6×7)

d) 350 × 100 = ... (350 , 250 , 35000)

e) The time shown in  is ... (1 : 00 , 2 : 10 , 1 : 40)

4 Arrange the following :

a) 8157 , 9587 , 9751 , 9718 , 8000

Ascendingly :

b) 30005 , 50300 , 35000 , 50000 , 55555

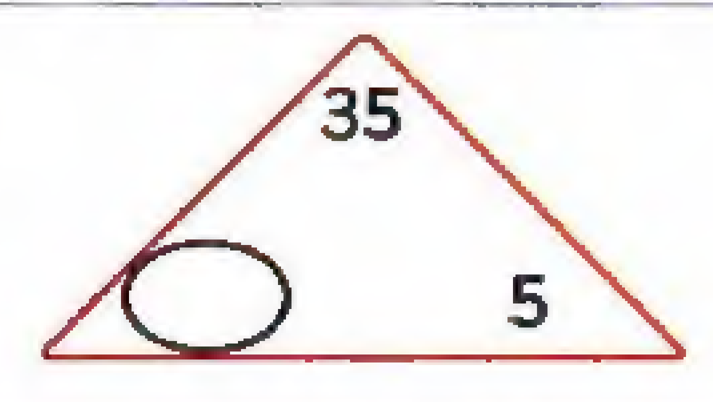
Descendingly : : ....



Self - check

Bakkar Self - check 11

1 Complete the following :



...... × ...... = 35

...... × ...... = ...

35 ÷ ...... = ...

35 ÷ ...... = ...

2

Ziad wants to grow the cotton plant, and a single cotton plant needs a unit area . He wants to make the field of 5 rows , and in each row 4 units .
How many cotton plants can be grown in Ziad Garden ?

The solution : ....

3 Choose the correct answer :

a) 120 × 7 = ... (480 , 840 , 804)

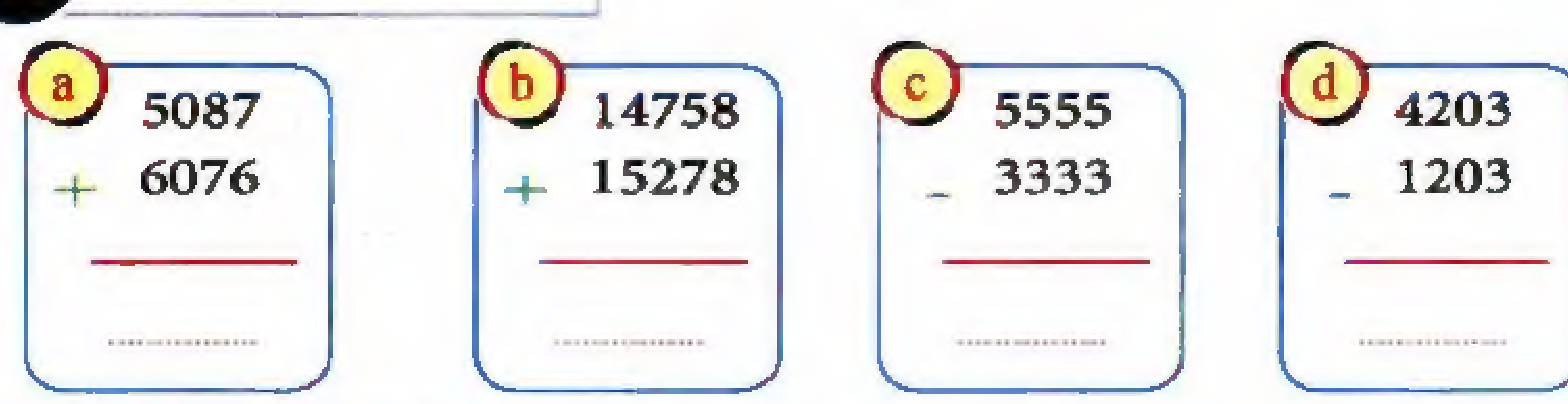
b) From the factors of 8 is 1 , 2 , ... and 8 (7 , 6 , 4)

c) 66321 (......) 663210 (> , = , <)

d) Quarter of an hour = ... minutes (15 , 30 , 60)

e) I , II , III .... (III , II , IIII)

4 Find the result :



a)
  5087
+ 6076
______
....

b)
  14758
+ 15278
______
....

c)
  5555
- 3333
______
....

d)
  4203
- 1203
______
....



Skill part

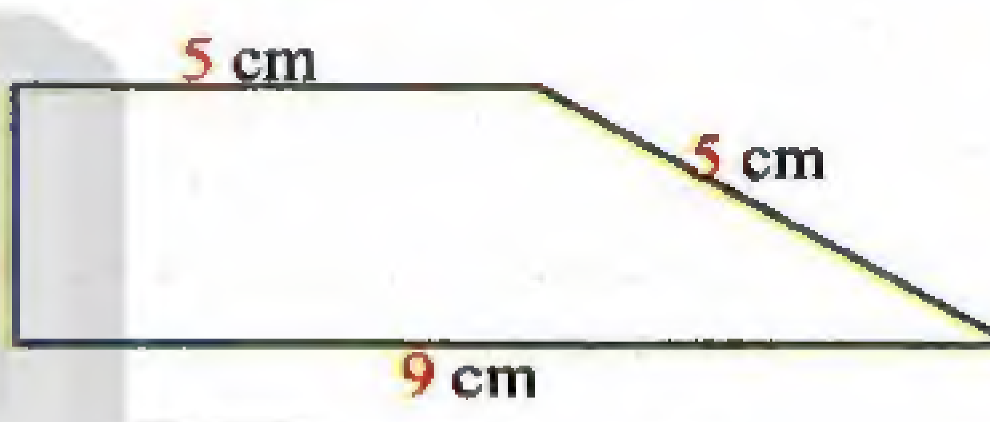
Bakkar Self - check 12

1 Complete the following :

(a) 0 × 10 = ...
(b) 77 ÷ 7 = ...
(c) 1 × 7 = ...
(d) 8 × 3 = ...
(e) 6 + 6 = ...
(f) 18 - 2 = ...
(g) ...... - 8 = 4
(h) 1 × 7 = ...
(i) 15 ÷ ...... = 5

2 Find perimeter of the figure :

The Perimeter = ...cm



3 Choose the correct answer :

(a) 5 cm = ... mm (5 , 50 , 500)

(b) The place value of 5 in 86513 is.... (tens , hundred ,thousand)

(c) The capacity of a cup of milk can be equal ....
(200 leter , 200ml ,10 leter)

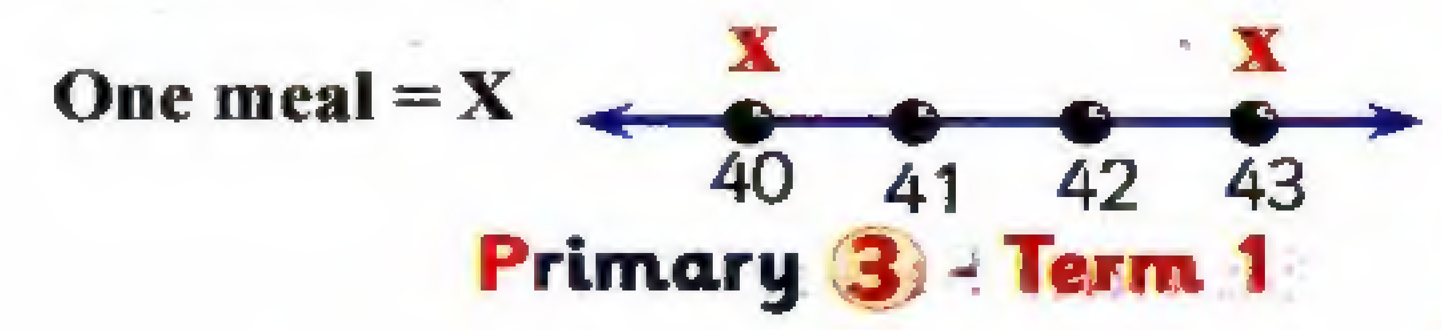
4 Complete the representation of the number of potatoes meal in the bags on the line plot representation chart with the sign X:



- Complete

The number of bags containing 43 potatoes
= ....

One meal = X





Self - check

Bakkar Self - check 13

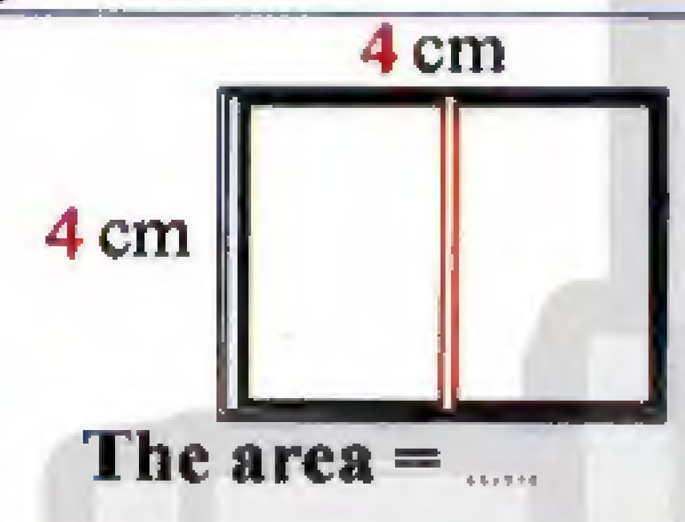
1 Complete the following :

(a) 24 - 2 = ... (b) 45 ÷ 5 = ... (c) 10 × 3 = ...

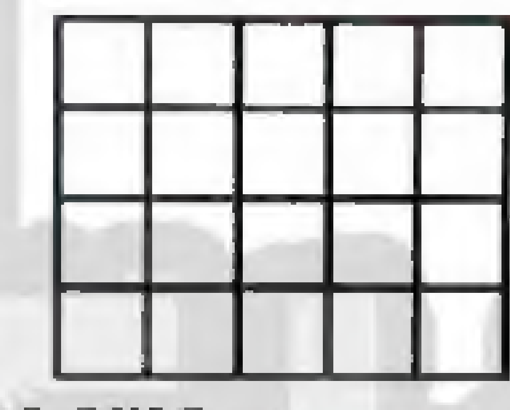
(d) 24 + 3 = ... (e) 18 + 6 = ... (f) 16 ÷ 4 = ...

(g) 24 × 1 = ... (h) 0 × 125 = ... (i) 10 - ...... = 2

2 Find the area of the following :



The area = ...



The area = ...

3 Choose the correct answer :

(a) The smallest number can be formed from 6,5,8,7 is .... (8765 , 5678 , 8567)

(b) 200 cm = ... m (2 , 20 , 200)

(c) 51 thousand and one = ... (5101 , 15001 , 51001)

(d) 50 × 70 = 5 × 7 × .... (35 , 10 , 100)

4 Write the time as shown:



.... : ....



.... : ....



.... : ....



Skill part

Bakkar Self - check 14

1 Find the result :

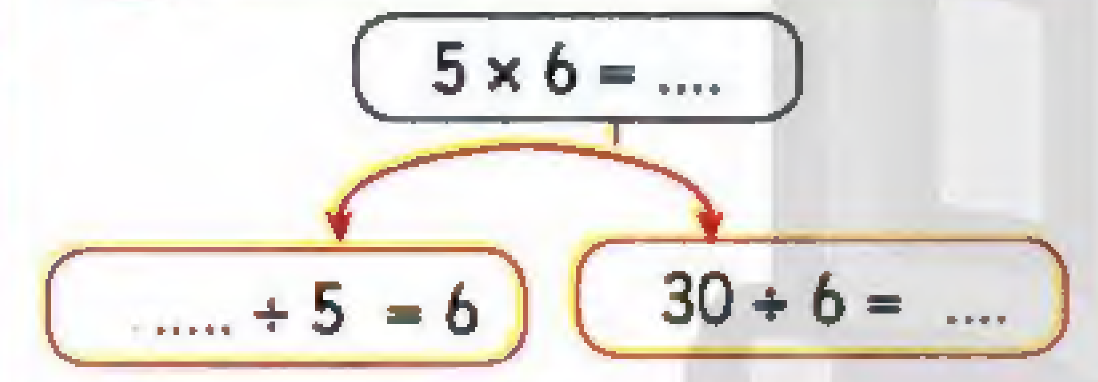
a) 6005 + 3299 = ...

b) 3289 + 2787 = ...

c) 4321 - 3121 = ...

d) 9895 - 5775 = ...

2 Complete the following :

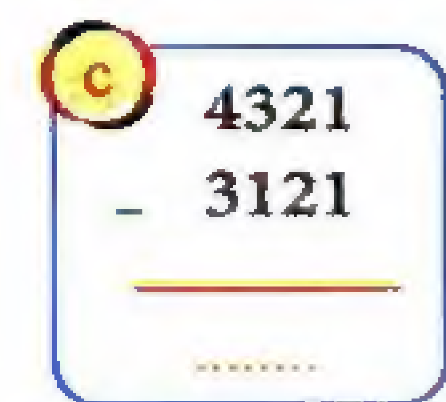


6 × ...... = ...

...... × ...... = 42

42 ÷ 6 = ...

42 ÷ ...... = 6



3 Choose the correct answer :

a) The place value of 3 in 3158 is ...... (ones , hundred , thousand)

b) Half of an hour = ... minutes (5 , 30 , 15)

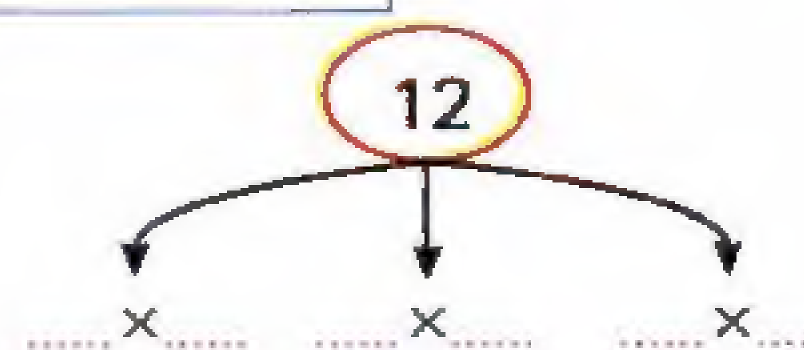
c) 6 × 13 = (6 × 6) + (6 × ......) (9 , 8 , 7)

d) 45 ÷ (3 × 3) = ... (9 , 5 , 7)

e) 9 (.........) 28 ÷ 7 (> , = , <)

4 Write the factors of the following numbers :





Factors of 10 : ....

Factors of 12 : ....